TANGANYIKA

Annual Report
of the
Medical Department
1954

Volume 1

BUREAU OF HYGIENE & TROPICAL DISEASES
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TANGANYIKA

Annual Report of the Medical Department for the year 1954

PART I

I.—GENERAL REVIEW

There were no changes in the administrative arrangements of the Medical Department during 1954. The four regions each consisting of two provinces remained under the charge of Assistant Directors stationed at Morogoro, Mbeya, Arusha and Mwanza. Senior medical officers were stationed in the other four provinces at Dodoma, Tanga, Mtwara and Tabora. District medical officers in charge of administrative districts and other local areas are responsible to the assistant directors.

2. This year the annual report for the Medical Department has had to be submitted rather earlier than usual. This has resulted in the omission of the usual appendices giving statistical data; these take a long time to collect and an even longer time to correct and put into a proper form. They will be published later in the year. This report can therefore only be regarded as a chronicle of facts and trends and can make no claim to present an accurate factual assessment of the state of public health in Tanganyika.

3. In Tanganyika the registration of births and deaths is as yet almost non-existent, although some few enlightened districts have begun to collect necessary vital statistics. It will be many years before such returns can be regarded as accurate, and accuracy will only be achieved when the public has learnt, by experience, their obligations to notify their births and deaths. In the past the Department has had to rely upon the hospital returns which have provided a most useful source of information as long as errors in compilation are kept in mind.

4. It is fortunate, however, that in recent years detailed health surveys of certain communities in the Lake Province have been carried out by the East African Medical Survey. The full reports have not yet been published, but commentaries on the results appeared in the Annual Report for the Unit for 1953. The areas selected were Ukara Island on Lake Victoria, Bukoba District and the Kwimba District of Sukumaland. These commentaries are both interesting and constructive and are mentioned in detail later in this report. In addition, a sanitary survey of townships in selected places in the territory has been carried out by the Assistant Director of Medical Services, Mbeya, the Medical Officer in charge of the Health Training School, Kongwa, and the Chief Health Inspector. This, too, should throw valuable light on the existing sanitary conditions of urban settlements in this territory.

5. For the second year in succession famine conditions were present in Manyoni, Dodoma and Mpwapwa Districts. This was due to a low and badly distributed rainfall, together with an invasion of army worm which destroyed such crops as had survived the drought conditions. A policy of major famine works throughout the affected areas was followed rather than the free issue of grain as was done in 1953. Those unable to work were given certificates entitling them to a ration of maize and beans each month. Relief for the famine stricken people was provided by various agencies, in particular U.N.I.C.E.F. who supplied a large quantity of dried skim milk for distribution. The Oxford Famine Relief Committee also generously provided the sum of £100 towards the assistance of the population in the famine areas. This was expended on the purchase of multi-vitamin tablets which will help to control malnutrition, particularly among women and children.

6. In November fifty tons of dried milk arrived as a gift from the United Kingdom government. This was distributed to government and mission hospitals, and child health centres. Large quantities were also sent to areas of the Central Province where famine conditions were widespread. This was to supplement the diet of undernourished babies and children.

7. Also during the year, the World Health Organization allocated three thousand dollars from its budget for the purchase of equipment for government and mission medical and health training centres. This equipment is for teaching purposes and includes microscopes, models, charts, film strips, etc. Some of these had already arrived at the end of 1954 and the rest are expected in 1955.

8. In September, 1954, the Executive Board of U.N.I.C.E.F. made an allocation of fifty-eight thousand, three hundred dollars for equipment and supplies for government and mission training centres, and maternity and child welfare clinics. This equipment will be a most valuable contribution to the development of training programmes and maternity and child health services.

9. At the beginning of the year it was decided, for reasons of security, to keep all the Kikuyu in the northern part of Tanganyika under close surveillance. In January a Kikuyu families' camp was opened at Arusha, originally as a transit centre, but it soon became semi-permanent and additional camps had to be opened. From January to the end of June, 3,872 Kikuyus were accommodated, of whom 1,321 were adults and 2,551 children. In Handeni District a second settlement was started where the Kikuyu were encouraged to lead a normal tribal life within a restricted area. This was placed under the medical charge of a special grade medical officer, assisted by two medical assistants and nursing staff. The work of the staff was made most difficult by the apathy and lack of co-operation on the part of the mothers, who cared nothing for the welfare of their children. Their habits were extremely insanitary and a long time passed before proper hygienic control could be enforced. At Miombo, near Urambo in the Western Province, large numbers of male Kikuyu were detained in two camps from January until July when they were transferred to Kenya. Dispensaries were set up in each camp and despite shortage of water and the great difficulty in maintaining satisfactory sanitary conditions, the general health of the inmates was good.

10. Further progress has been made at Mirembe Mental Hospital. The hospital has been enlarged to the extent of four new wards and an occupational therapy block. Other major alterations have been begun to provide an adequate kitchen and store rooms. The number of patients rose steadily. There are now almost twice as many patients in Mirembe as in 1950 and the admission rate has more than doubled since 1947.

11. Once again no major epidemics occurred during the year. As forecast in 1953, the number of cases of sleeping sickness rose considerably, but nowhere did the position become serious. This increase appears to be directly related to a cyclical increase in the numbers of flies rather than to relaxation of preventive measures.

12. Sporadic cases of poliomyelitis were reported from most regions. At Nzega in the Western Province a minor outbreak occurred involving eighty-five reported cases. This probably means that many more cases must have occurred which were neither diagnosed nor notified. Quarantine measures and a campaign against flies and dirt were promptly instituted. Traffic movements were restricted and large gatherings forbidden. By this means the outbreak was quickly brought under control and by the end of the year could be regarded as finished.

13. A few small outbreaks of smallpox occurred in different parts of the country. Cases were reported from Lushoto, Muheza and Same Districts in the Northern Region, from Musoma, Bukoba, Kigoma, Ufipa and Sukumaland in the Western Region, from Ulanga and Kilosa in the Eastern Region, and from Rungwe, Chunya and Mbeya in the Central Region. Some of these cases were part of the 1953 epidemics, notably in Sukumaland and Ufipa. By the middle of the year both these latter centres had been eliminated by the usual control measures.

14. The present departmental policy of extending out-patient treatment for leprosy was continued. Following a visit by the Inter-territorial Leprologist to the Western Region, he and a Medical Specialist drew up an organized scheme for out-patient treatment throughout the region. This was devised to handle a total of at least 3,000 cases at fifty-seven centres. Most of these centres are already in operation although not to full capacity. The building of a new leprosarium at Mkunya near Newala in the Southern Province was continued. At Makete the erection of new buildings, some of which were financed by the Red Cross, continued steadily. At Mtindiro in the Northern Region further improvements were carried out, particularly to the out-patients block.

15. The problem presented by tuberculosis in the territory has resulted in a greater interest being taken in the treatment and welfare of patients suffering from this disease. Inevitably, this has led to overcrowding of existing institutions, but this will be in some way helped when plans for the development of tuberculosis treatment facilities in the Southern Province have been implemented. Towards the end of the year a Conference on Tuberculosis was held in Nairobi with Professor Heaf in the chair. This was attended by the Director of Medical Services, the Senior Specialist, Kibongoto, and the Medical Specialist, Dar es Salaam.

16. The Central Advisory Committee on Nutrition which was set up in 1953 has had under review a wide range of nutritional questions. Among these were recommendations made by Dr. Cicely Williams in a report on conditions in the Central Province resulting from prolonged shortage of food after failure of the rains. The Committee also dealt with questions of food storage, milling and enrichment of maize flour, school and labour dietaries, improvement and expansion of milk supplies, employment of female labour in towns and the nutrition of urban dwellers.

17. A considerable amount of subsidiary legislation affecting medical and public health work was enacted during the year in the form of rules and regulations under various ordinances. These included rules under the Mental Diseases Ordinance, regulations under the Nurses and Midwives Ordinance and regulations under the Medical Practitioners and Dentists Ordinance concerning the conduct of inquiries by the Tanganyika Medical Board.

18. As regards government hospitals, further progress has been made in the building programme drawn up in 1952. During 1954 a new seventy-five-bed hospital was opened at Lindi and the building of hospitals at Mbulu, Nzega, Njombe and Sumbawanga was continued. The foundation stone of the new 400-bed hospital in Dar es Salaam was laid in August by His Excellency the Governor. In addition, of three out-patient clinics which are to form subsidiary units of the new hospital group in Dar es Salaam, one was opened during the year and the second almost completed. Besides these new hospital projects, extensions and improvements to existing hospitals were carried out. These included new wards at Dodoma, Arusha and Mirembe Hospitals.

II.—STAFF

19. Once again the losses among senior staff due to resignations, transfers and illness were more than the number of officers recruited, so that at the end of the year the staff position was worse than in 1953. Many posts were filled by temporary appointments, but the departmental establishment was still far below the figure for 1952. A summary of the principal losses and gains is as follows:—

	New Appointments	Retirements, etc.
Medical Officers	7	9
Nursing Sisters	18	18
Health Visitors	3	4
Sister Housekeepers	2	–
Stewards	1	1
Health Inspectors	2	3
Dental Surgeon	1	–
Malaria Field Officer	–	1
Warden	1	1
Chief Storekeeper	1	–
Woman Administrative Assistant	1	1

20. The position as regards Junior and Clerical staff remained much as before. The numbers of these depend entirely upon the output of the training establishments which will not be in a position to fill departmental vacancies for many years to come.

PART II.—PUBLIC HEALTH

III.—COMMUNICABLE DISEASES

(A) Direct Infections

Smallpox (*Variola*)

Reported Incidence, 1950-1954

	1950	1951	1952	1953	1954
Cases	6,390	885	370	1,200	928
Deaths	1,345	139	34	54	28
Case Mortality per cent	21·04	16·3	9·19	4·5	3·0

21. This endemic disease caused small epidemic outbreaks from time to time during the year. In almost every case the sickness was mild and typical of variola minor. For this reason many cases were not reported to the health authorities as the infection caused little alarm among the population. In the Central Region it was noted that the incidence was highest among children, and adult women were more commonly infected than men. In the Western Region, Bukoba District experienced three distinct outbreaks with over 160 cases. Many of these were in isolated areas of Karagwe where it was found to be fairly widespread before effective control measures could be instituted. Smaller outbreaks were reported from Musoma and Kigoma Districts. The Sukumaland epidemic of 1953 cleared up fairly rapidly in the early part of the year. In the Central Region a large number of cases occurred in scattered parts of Rungwe, Chunya and Mbeya Districts during the early months of the year.

22. No serious outbreaks were reported from the Northern Region, although a few cases occurred in Lushoto and Same Districts.

23. The Eastern Region reported two epidemics in Ulanga District, and cases were found at Kilosa at the end of the year. The Southern Province remained remarkably free. Only ten cases were reported, and of these seven almost certainly were infected across the border in Portuguese East Africa. Labourers and dependants forwarded for work on the sisal estates from the Southern Province were vaccinated before they left Lindi, and it was suggested that this practice should be applied to other centres.

Poliomyelitis

Reported Incidence, 1950-1954

	1950	1951	1952	1953	1954
Cases	14	24	90	153	170
Deaths	–	5	10	24	12
Case Mortality per cent	–	20·8	11·1	15·6	7·0

24. Apart from sporadic cases reported from many districts an epidemic of this disease broke out in Nzega in September. By November it was under control, but eighty-five cases of paresis were reported. On the usual calculations this means that about 250 cases of all types must have occurred. The

cases were spread throughout the district, but mainly in the Busongo–Ulaya area. Quarantine measures and a campaign against flies and filth were put in hand. All infected houses and many nearby ones were sprayed with gammexane P. 250. Seven deaths occurred in the Nzega outbreak.

25. North Mara and Musoma Districts of the Lake Province also reported a few cases, although many more were suspected. A small outbreak with seven cases among Africans was seen at Lushoto, while a European lady acting as a temporary medical officer at Moshi also had a mild attack. Other cases occurred at Monduli and Korogwe.

26. The relative importance of the fœcal contamination of food and water supplies through defective sanitation (whether by flies or other means) in the transmission of poliomyelitis virus has not yet been precisely determined. But of the importance of direct spread between person and person—by contact or near contact—there is no question. Clear cut evidence on this point was recently demonstrated by the District Medical Officer, Bukoba, and is worthy of record as similar evidence has not previously been noted in East Africa. The District Medical Officer writes—

> "In October 1954 a butcher from Bukiriro and three of his friends went to Nzega to buy cattle. They came back to Bukiriro in the first week of November. None of the four men had been or was ill.
>
> A week later a three years old child, which lives some 200 yards from the home of one of the butchers and who often plays in the house of the butcher, took ill and was diagnosed as a case of polio. This child was the son of the Bukiriro Sub-chief. A few days later a second child, living near the Sub-chief's place, took ill. At about the same time the child of one of the Bukiriro headmen, who had visited the Sub-chief, bringing his child with him, also went down with polio. A fourth case, also a child, occurred four to five miles away from Bukiriro, but this child had been to Bukiriro to visit its grandparents at the time when cases two and three were still ill.
>
> All cases were mild. No deaths. No new cases have been reported during the last month, and everything appears to be quiet".

Dengue

27. No cases were reported among Africans, and there was no recurrence of the 1952/53 epidemic on the Makonde Plateau. A few cases among Europeans were said to have been seen in the Southern Province.

Leprosy

28. Much progress was made in accordance with the new policy of extending the facilities for the out-patient treatment of leprosy. In the Eastern Province two rural medical aids from Morogoro and Kilosa, and two tribal dressers from Ulanga District have received a month's intensive course in the diagnosis and treatment of leprosy. They have returned to their dispensaries and arrangements have been made for a regular monthly visit by the district medical officer. Cases will be screened and lepromatous ones sent to Chazi. Tuberculoid cases will be treated with sulphones, yeast and iron in the native administration dispensaries. Rules have been laid down forbidding treatment in a patient with a haemoglobin of less than seventy-five per cent.

His Excellency the Governor laying the foundation stone of the new 400 bed hospital in Dar es Salaam

New Dispensary, Ilala, Dar es Salaam

29. In the Lake Province a similar scheme has been drawn up with the assistance of the Inter-territorial Leprologist. This has in view the employment of fifty-seven centres to treat an estimated total of 3,000 cases.

30. The out-patient scheme centred on Muheza which was established in 1953 continued to prove very successful and popular. Treatment teams toured a large area on eleven regular routes, and a total of 2,630 patients received treatment during the year. The out-patient work established in the Masasi and Newala Districts continued successfully under the supervision of a B.E.L.R.A. worker operating from the U.M.C.A. hospital at Lulindi.

31. At Chazi the large numbers of cases leaving the leprosarium before completing treatment gave rise to some anxiety. It was thought that this was because some of the patients had been coerced by relatives to enter the centre, while others considered that they should be fed and clothed free and were unwilling to do any work in return.

Tuberculosis

32. Kibongoto remained the chief centre for treatment of tuberculosis. The results of treatment were even better than in 1953, and the hospital was as usual full to capacity throughout the year. The new unit at Kongwa had a successful year and a sputum conversion rate of thirty-five per cent was achieved with a turn-over of eighty patients suffering from all types of the disease.

33. At Ndanda in the Southern Province a ward has been set aside for tuberculosis patients. The Benedictine Mission now receives a grant-in-aid for tuberculosis work and hopes to build further accommodation in 1955.

34. Throughout the territory an increasing incidence of the disease is beginning to be reported. This may however only reflect the increasing interest now being taken in tuberculosis.

The Dysenteries and Enterics

35. Typhoid fever increased during the year in Tanga Province. The number of cases reported was 175 as compared with 83 in 1953 and 128 in 1952. More than half the cases occurred among labourers on sisal estates, but no epidemic outbreaks were seen. In Morogoro District the system of weekly reports from sisal estates of the occurrence of cases of bacillary dysentery and diarrhoea has proved valuable. The employers as a result keep the standards of sanitation at a high level and no appreciable amount of either disease occurred during the year.

36. Small outbreaks of typhoid were reported from a sisal estate and two schools in Morogoro and Kisarawe Districts. At Mtwara, a few cases of typhoid occurred among prisoners at Lilungu prison. Attention to the sanitation quickly brought the outbreak to an end.

37. Elsewhere in the territory sporadic cases of typhoid fever were reported. The dysenteries still account for a large number of admissions at all district hospitals.

Venereal Diseases and Yaws

38. The Venereal Disease centre in Bukoba District continued its work during the year. In March, the Mobile Health Unit began operation in order to carry the venereal disease treatment into rural areas. Several thousand cases were treated with good results. Observations made during the course

of the campaign indicate that the incidence of primary and congenital syphilis as seen in hospitals is still going down, and secondly large numbers of so-called late cases of syphilis were found to be serum negative on examination. This means that reports of cases of tertiary syphilis treated at dispensaries must be viewed with suspicion.

39. The cost of treating all cases of syphilis seen at Mbeya Hospital with penicillin as recommended by the World Health Organization was estimated at £650—a sum out of proportion to the means at present available. On the other hand, cases of gonorrhoea resistant to penicillin, presumably owing to inadequate dosage, are reported from Morogoro.

40. The experimental treatment of yaws with penicillin aluminium monostearate by single injection, was continued in Morogoro District and extended to Mafia Island. It has proved difficult to follow up cases, but the results of this treatment are reported as being very satisfactory.

(B) Vector Borne Infections

Plague

Reported Incidence, 1950-1954

	1950	1951	1952	1953	1954
Cases	–	263	573	12	–
Deaths	–	40	100	3	–
Case Mortality per cent	–	15·21	17·45	25·0	–

41. No cases of plague were reported during 1954.

Relapsing Fever

Reported Incidence, 1953-1954

	1953	1954
Cases	3,403	3,563
Deaths	41	25

42. No major outbreaks of the disease were reported during the year, but sporadic cases were notified from many districts. The tick eradication campaigns in townships were continued with success, and in the Central and Western regions the dusting of houses with gammexane powder was extended to rural areas. The sale to the public of this powder in suitable containers for dusting has been investigated.

Sleeping Sickness (Human Trypanosomiasis)

Reported Incidence, 1950-1954

	1950	1951	1952	1953	1954
Cases	974	477	346	756	1,230

43. As forecast in 1953 an increased incidence of sleeping sickness occurred during the past year. Complete figures are not yet available, but by the end of October over 1,000 cases had been reported, compared with 732 in 1953.

44. In the Western Province there have been well over 700 cases, and two-thirds of them came from Tabora District. With one exception, the position within the settlements in this area was satisfactory, but at the beginning of the year many people, especially in the fishing villages, were still living outside recognized settlements. A great deal has been done during the year by the Settlement Officer to bring the people into closer settlement. Unfortunately, these villages are visited by many fish traders from other parts of the district and far outside it, with a consequent risk of the spread of sleeping sickness.

45. In the Lake Province, the road connecting Runazi and Kwanga in Biharamulo District continued to be a source of infection. Protective clearing for the two settlement areas there was completed during the year. In February a case was reported from Ngara District, the first for many years. Investigation showed that many persons living in Southern Ngara and near Nyakahura in south-west Biharamulo had been infected. In one small focus, some forty persons died between February and May from what was probably sleeping sickness. Measures were taken to meet the situation, which was well controlled by the end of the year. In the Southern Province, a small outbreak discovered in the Masasi District died down. Isolated cases were reported from Tunduru and Songea Districts. The Kilimarondo focus was quiescent, there being fewer cases than in the previous year.

46. The disease continued to smoulder in the Babati–Magugu area of Northern Province. It is unlikely that any permanent good can be done here until a major reclamation scheme reopens the whole area below the rift, including Kiru, to planned settlements.

47. Two isolated cases were reported from Kidaki in Kilosa District and from a sisal estate in Tanga Province. Both these cases came from Ruanda-Urundi and were almost certainly infected there before arrival.

48. It is interesting to note that the *gambiense* focus at Kakunga in Western Province has shown a satisfactory decrease in the number of cases following the prophylactic injections of pentamidine. Meanwhile, at the time when the Ngara outbreak was discovered, the Belgian authorities had a similar epidemic in an adjacent area in Ruanda-Urundi. Thinking they were dealing with their usual *gambiense* form of the disease, they used prophylactic injections of pentamidine as their control measure. Later, they considered that the outbreak was due to *T. rhodesiense*. The outcome of this inadvertent experiment will be watched with great interest.

Malaria

49. The resignation of one field officer early in the year and the transfer of an entomologist reduced the staff of the Tanganyika Malaria Unit to below establishment, although the vacancy for a field officer was filled at the end of the year.

50. Anopheline larval control measures were extended during 1954 to include more minor settlements, and the value of certain existing control programmes was increased by the posting of malaria assistants to Bagamoyo, Singida, Kingolwira, Tunduru and Ujiji. The appointment of malaria field officers to regions has increased the efficiency of anti-malaria measures in

townships and minor settlements. These remained essentially larvicidal, using "high spread malariol", but residual house spraying was carried out only when special indications were present. Drainage work proved particularly successful in Kigoma and Morogoro, and experimental lake-shore clearing of papyrus at Mwanza reduced the danger of breeding in the calm lake margin. The large-scale investigations by the East Africa Malaria Unit of the value of residual house spraying in hyperendemic areas, using dieldrin as the insecticide, reached a stage where spraying was about to begin in the Upare.

51. The presence of large fishponds within the flight range of mosquitoes from the towns of Korogwe, Moshi and Arusha (Tengeru) caused some difficulty in control. At Moshi a mild epidemic of malaria amongst the prisoners from this cause required immediate treatment. In Dar es Salaam permanent drainage plans for the international airport at Ukonga were abandoned in favour of mosquito control by residual spraying and routine larvicidal methods.

52. Twenty-seven Tanganyika students received instruction at Amani in malaria control work during 1954. The total staff of malaria assistants and orderlies was thereby increased to forty-five.

53. Research work on malaria and the vector mosquito included investigation of the effectiveness of D.D.T. and dieldrin larvicides in acetone and oil; the action of the drugs pyrimethamine, chloroquin and amodiaquin; mosquito feeding preferences and work on the sporozoite rate of *A. gambiae* in relation to climatic factors affecting mosquito mortality. Laboratory assistance was also provided for certain aspects of the Upare Malaria Eradication Scheme.

54. It was reported from Iringa that in no case during 1954 was it possible to show that any person contracted malaria within the township, and only three anopheline mosquitoes were caught during the year.

55. The number of cases of blackwater fever reported during the year continued to fall, and in some regions the disease did not occur at all.

(C) HELMINTHIC INFESTATIONS

Schistosomiasis and Ankylostomiasis

56. Both schistosomiasis and ankylostomiasis are endemic throughout the territory. Control can only be achieved through the education of the population in proper sanitary habits. This is a long-term policy, but was tackled energetically in the eastern and central medical regions during 1954. Reports, however, showed that treatment was still unsatisfactory owing to irregular attendance and the rapidity with which patients were reinfected.

57. An investigation of various groups of persons in relation to these two diseases was carried out during the year in Morogoro District. The District Medical Officer examined schoolboys at a residential school and at a primary day school, labourers at a sisal estate, prisoners at Kingolwira Prison and boys at Kingolwira approved school. In each group stools and urine were examined for ova and the blood haemoglobin estimated. Careful investigation failed to show any direct relationship between the haemoglobin level and the presence or absence of hookworm ova in the stool. No evidence was found that hookworm infestation caused anaemia in these groups. It was thought probable that the haemoglobin level was more directly related to the standard of feeding. Similarly, no relationship was found between the presence or absence of schistosomiasis and anaemia.

IV.—MATERNITY AND CHILD HEALTH

58. Attendances at both maternity and child health clinics continued to increase during the year. These are conducted by voluntary organizations in many centres and in some districts the native authorities have established their own. The opening of the Mary Bennett Clinic at Kindi in Northern Province was a notable addition to the latter during 1954.

59. In the Central Region, health nurses were stationed for the first time at Iringa, Tukuyu and in Rungwe District. They conducted ante-natal and child health clinics, visited schools, treated minor ailments such as scabies, gave health talks, held sewing classes, visited the people in their homes, inspected villages and assisted in the management of obstetrical emergencies. Every effort was made to resist the demand for their services as midwives, as if this were allowed little time would be left for the work for which they were trained.

60. The posting of health visitors to Dodoma and Mpwapwa allowed the services for the care of mothers and young children in these famine areas to be increased. Malnutrition was tackled by the distribution of tinned milk and vitamoil at native authority dispensaries in Dodoma District wherever food shortage was apparent. In Mpwapwa, rice, tinned milk and chocolate were issued similarly. Only mothers and young children were assisted in this way as there was plenty of work available for the able-bodied men.

61. In the Southern Province it was reported that many of the mothers appeared to be only twelve or thirteen years of age. The question of child marriage is at present being investigated.

62. At Bukoba it was found that the number of complicated and obstructed labour cases brought into hospital was much less than some years ago. This can be attributed to the increasing use of ante-natal clinics and other maternity services.

V.—SCHOOL HEALTH

63. In Dar es Salaam the inspection of schoolchildren by the medical officer had to be cut down to a minimum and included only new entrants to the schools. As a result greater emphasis was placed on general health care in the school clinics carried out by the nursing sister attached to the schools. Two new clinics were opened in African schools and the existing ones were improved during the year.

64. Throughout the territory district medical officers and others attempted as far as possible to visit primary schools and examine children in addition to their mandatory routine examinations of children in the higher schools.

65. In the Central Province, where famine conditions occurred for some months, rural schools were visited frequently, since inspection of the schoolchildren provided a useful indication of the degree of malnutrition in that area. In places where such conditions were present school meals were provided in the latter part of the year. These consisted of maize meal with milk, beans and vitamoil.

66. In general, the health of schoolchildren throughout the territory was good during 1954. No serious epidemics occurred and no serious malnutrition was discovered, except in the Central Province as mentioned in Section VII.

VI.—HEALTH EDUCATION

67. Health staff have continued to do what they could to augment the hygiene instruction already given by school teachers. Talks and demonstrations were given to parents at clinics and in their homes. This work was greatly assisted during the year by the posting of health nurses and health orderlies to various districts.

68. At the Sukumaland Show, a medical and health exhibit was provided by the East African Medical Research Unit with the co-operation of the District Medical Officer, Sukumaland. This attracted considerable interest and it is hoped that a permanent exhibit of a similar nature will be provided at the local Government training school newly established at Mwanza. In Bukoba, the Mobile Health Unit began its work in rural areas. So far it has been principally used to provide treatment for venereal disease, but it is hoped that this will also provide an opportunity for health propaganda during its stay in various centres.

69. Articles on health matters appeared in several vernacular newspapers. Talks were also broadcast from Dar es Salaam by the "Radio Doctor" and a health visitor.

VII.—NUTRITION AND FOOD SUPPLIES

70. For the second year in succession the rains failed over large areas of the Central Province. This had the effect of continuing famine conditions in Manyoni, Dodoma and Mpwapwa Districts. An invasion of army worm ravaged the growing crops which had survived the drought conditions and thus aggravated the food shortage. Thanks to energetic work by government officers and the prompt help supplied by international organizations and the Tanganyika Government, the degree of malnutrition did not become serious. The number of cases of such malnutrition admitted to Kongwa Hospital in 1954 was 144, with 33 deaths. In comparison, those who emigrated across the border to other districts where famine relief was not available suffered severely.

71. The food shortage was dealt with on the following lines:—

(a) Subsidized famine relief work for the able-bodied.

(b) Free food distribution for the aged, infirm and women and children in general.

(c) Distribution of seed and encouragement of early planting and proper cultivation.

(d) Assisted sale of assets such as cattle, where they were bred.

72. International relief was provided by the World Health Organization, U.N.I.C.E.F., and the Oxford Famine Relief Committee who provided dried skim milk and vitamin tablets. On the advice of the Medical Department, the dried milk was added to the maize flour at the time of milling in the proportion of one part dried milk to eight parts maize flour. This was intended to provide the equivalent of one pint of skimmed milk per person each day.

73. Famine camps were built during November at four centres. These were sited near native authority dispensaries and close to good water supplies. The inmates received the recommended famine issue of food, but in addition each one received an extra pint of milk. This distribution was under the

supervision of the native authority dispensary staff at each centre. At the end of 1953, a health visitor was posted to Dodoma and continued to work there during most of the year. Under her supervision issues of skim milk were made to under-nourished children up to the age of six. This was organized from eight centres throughout the area. In spite of these efforts very few of the children attended more than once to receive the milk.

74. A feature of this famine was the large number of cases of cancrum oris seen in children under the age of two. Treatment was usually unavailing and a very high mortality resulted. Dr. Cicely Williams visited Dodoma early in the year for the purpose of conducting a survey of the malnutrition as it affected children in the famine areas. Elsewhere in the territory food supplies were satisfactory and no change in the incidence of nutritional diseases was reported. Temporary local shortages occurred in Sukumaland and Ngara District.

75. The experiment at Kingolwira Prison of fortifying the diet with nicotinic acid with a view to lowering the incidence of pellagra was successful. Only one case of pellagra occurred in the group receiving the fortified diet, as compared with seventeen cases receiving the usual food.

VIII.—ENVIRONMENTAL HYGIENE

(A) Urban Housing and Sanitation

76. During the year the working party of the Township Sanitation Committee of Enquiry completed their survey of representative township and minor settlements of the territory, and the report will be presented early next year.

77. In the Northern Province the improvement of minor settlements has occupied much time. The uncertainty of ownership prevents the building of a better type of house in many cases. The rapid development of a "shanty town" on the outskirts of Arusha gave grounds for anxiety.

78. An improvement in the standard of African building and the submission of better building plans was reported from the Central Region. In other parts of the territory much new building was in progress.

79. A lot of trouble was noted in respect of sewage disposal in townships. The difficulties met with included impervious sub-soils, lack of cesspit emptiers, and the apathy of property owners, many of whom, it is noted, prefer to live in a morass rather than pay to have their pits pumped out.

80. At Kongwa the prevention of fly breeding in pit latrines was a difficult problem, particularly as experiments showed that the insects had acquired resistance to the usual residual insecticides.

(B) Rural Sanitation

81. The newly-qualified health orderlies were employed throughout the year on rural sanitary duties. It is too early to determine their value, but it is expected that they will assist in raising the standard of rural hygiene and sanitation in all districts where they are employed.

82. In the Western Region the training and appointment of sanitary headmen and overseers for rural areas was continued successfully. Native Authority sanitary orderlies are also employed in the Kilimanjaro area where their work includes special attention to the standard of butcher shops and eating houses.

83. In the Eastern Region emphasis was placed during the year on the provision of properly constructed pit latrines.

(C) Food Hygiene

84. The low standards of hygiene in the processing and handling of food, as noted in previous reports, showed little improvement during the year. Minor improvements were only achieved as the result of continual encouragement and direction on the part of the health staff. Too often results were only obtained following notices and the closure of premises.

85. At Tabora a start was made on the sampling of local butter and cheese to ensure that they complied with the Food and Drugs Ordinance. One large dairy there was re-equipped and improved and a pasteurization plant will be installed in 1955.

86. A new abattoir was planned and will be built next year at Morogoro. In Arusha, an improvement has resulted from the prohibition of dealings in maize and beans except in godowns recommended by the health authorities as being suitable for storage.

87. The Moshi Hotels Board closed two hotels in November for failure to comply with previous notices. A new abattoir was opened there during the year.

(D) Water Supplies

88. Considerable improvement in the water supplies at Arusha and Moshi was reported during the year. Iringa also had an excellent supply which was more than adequate for the needs of the community.

89. Elsewhere the position was not so good. Tabora remains the most difficult area from the point of view of water supplies. The dam held out during the dry season but strict rationing had to be enforced mainly due to a bottleneck at the filters. Until a new filtration unit is installed shortages are likely to continue. Existing plant can only supply about 100,000 gallons daily and the town needs nearly double this amount. Frequent bursts in the main still caused trouble at Lindi. A reserve tank was fitted to ensure a permanent supply to the hospital where stoppages in the supply had caused much inconvenience. At Mtwara, owing to rapid wear in the pumping machine the town was without a twenty-four hours supply for most of the year. Trouble was again experienced at Songea through contamination of the supply with bilharzia.

IX.—INDUSTRIAL HEALTH

(A) Health of Labour

90. It is difficult to compare the health of labourers working on sisal and other estates with that of the surrounding population, but the general impression as reported from all parts of the territory is that the standard of health is higher among employed labour. The health of the average recruit who may come from a famine area improves during his stay on an estate,

provided that as a result of communal living he is not exposed to such conditions as tuberculosis. This disease can easily be missed in its early stages, especially among recruits where malnutrition is rife. It is reported that about half the 120 cases of tuberculosis referred to Tanga Hospital came from sisal estates. The present practice is to treat such cases until they are fit to travel and then repatriate them.

91. The Ross Institute continued its activities in the control of mosquitoes and hookworm. The incidence of these two diseases is reported as being less on those estates which employ this organization.

92. Once again, the vaccination of labourers before they are allowed to proceed to their destination has proved its worth. No epidemics and few instances of a spread of disease can be put down to this source. During an investigation of a random sample of 116 male labourers at Kingolwira Sisal Estate, the District Medical Officer found that the average haemoglobin level was eighty-nine per cent. This is well above the average of the surrounding population.

(B) Industrial Diseases

93. In Moshi District anthrax and arsenical poisoning were the most important industrial risks. The latter resulted from compounds used in the treating of hides and skins. One case of dermatitis of the arm due to diesel oil was reported. Among workers on sisal estates injuries from sisal thorns were the principal hazards. Unless these are satisfactorily and immediately treated, as is done on many estates, they may result in ulcers.

(C) The Housing of Labour

94. The standard of the housing of labour, particularly on the sisal estates, is good, and reports showed that the improvement noted in past years was maintained.

X.—INTERNATIONAL AND PORT HEALTH

95. In 1954, after discussions between the Director of Medical Services and the Municipal Council, it was agreed to amalgamate the appointments of Port Health Officer and Medical Officer of Health. By this measure an effective integration of the two preventive medicine services operating in Dar es Salaam was ensured.

96. In August, Zanzibar reverted to the status of a yellow fever receptive area. This caused an increased demand for inoculation, which became compulsory for travellers from Tanganyika to Zanzibar.

97. The new airport at Ukonga opened in October; this meant additional responsibility for the Port Health Officer in the supervision of the general sanitation and the maintenance of mosquito control measures there. At the old airport these were the responsibility of the Municipality, but the Ukonga Airport is outside the boundary.

98. During the year there was a further increase in traffic, both in the harbour and at the airport. No cases of any of the six "quarantinable" infectious diseases were reported, nor were any such cases notified as having died or been landed before the vessel's or aircraft's arrival in Dar es Salaam.

99. There was an increase in the number of dhows and schooners trapped for rats during 1954. Of those rats examined in the laboratory, none was found infected with plague.

100. The Sleeping Sickness Specialist was one of the Tanganyika representatives at the Anglo-Belgian Conference on Migrant Labour held at Kampala in November. Of special interest was the problem of the large numbers of Ruanda-Urundi natives employed on coffee and sugar production who have to pass through sleeping sickness areas *en route* to their places of employment.

XI.—HEALTH OF PRISONERS AND DETAINEES

101. Although the health of prisoners throughout the territory was generally satisfactory during the year, many persons admitted to prisons in the Central Province showed signs of malnutrition as a direct result of the famine. An examination of the prisoners at Kidahi camp in Kilosa District showed that a high proportion of them were suffering from malnutrition and were unfit for hard labour. This was not due either to conditions or diet, both of which conformed to regulations, but was due to the fact that the prisoners had arrived in a state of malnutrition. The worst cases were evacuated to regular prisons, and subsequent visits showed that good vegetable gardens had been established and that the health of the prisoners had returned to normal.

102. In Isanga gaol in Dodoma District, the number of cases of vitamin deficiencies, particularly pellagra, rose steadily during the year. At one time forty cases of obvious vitamin B deficiency were under treatment out of a total strength of about 600. Commercial dried yeast was used for treatment and was popular with the patients as it was reconstituted with water and allowed to "work" before being issued. Another effect of famine recorded from this gaol was the high incidence of non-specific gastro-enteritis. This was thought to be due to the sudden increase in the quantity and calorific value of their diet on admission. This was reduced by cutting down the carbohydrate ration and introducing extra protein in the form of dried skimmed milk.

103. About thirty cases of pellagra were reported from Tabora, but once again this was confined to prisoners coming from the Central Province.

104. At Kingolwira prison the haemoglobin level of the prisoners was ninety-two per cent. The introduction of nicotinic acid into the diet reduced the incidence of pellagra to a considerable extent.

105. At Moshi, what might have been a rise in the number of cases of malaria was found to be due to mosquito breeding in the adjacent fishponds. Treatment with gammexane eliminated the danger with minimal mortality among the fish.

106. The health of the Kikuyu detainees living at Tamota in Handeni District was carefully supervised under the direction of a medical officer seconded for the purpose. This entailed setting up a hospital and the inauguration of a sanitary service. Maternity and child welfare services of limited scope were also instituted. During the year over 8,000 out-patients were treated. One or two small epidemics of infectious disease occurred, but were quickly controlled. In the early days the many cases of infantile malnutrition caused a great deal of concern. By the end of the year a large tract of uninhabited country had been transformed into a thriving settlement with a number of villages centred round a Boma and trading area.

PART III.—CURATIVE SERVICES

XII.—HOSPITALS

(A) Dar es Salaam Hospitals Group

107. This Group comprises the Ocean Road Hospital, the Sewa Haji Hospital, the African Maternity Hospital, (Muhimbili), the Infectious Diseases Hospital and the Mental Hospital, (Msasani).

108. At the Ocean Road Hospital the new maternity wing opened in 1953 still remained without air-conditioning due to the non-arrival of certain essential parts.

109. The new ward at the Sewa Haji Hospital for the treatment of long-term orthopaedic cases came into use at the beginning of the year. At the same time the adjacent ophthalmic unit was officially opened.

110. At Ilala an out-patient clinic built to a new design was completed and opened in May. This is the first of three or more dispensaries of similar design to be built in the outlying areas of Dar es Salaam with the object of providing a more convenient service for African patients and at the same time relieving the burden of out-patient work at the main hospital. At Ilala, an average attendance of 350 patients a day was quickly attained, the maximum number for which the building was designed.

111. The foundation stone for the new Group Hospital to be built at Msimbazi was laid by the Governor on the 28th August, 1954. By the end of the year tenders had been called for, for the construction of the first part of the scheme.

112. The work of the Muhimbili Maternity Hospital and Child Health Centre continued without change throughout the year. The average number of deliveries in hospital was 100 a month. Ante-natal clinics were held at Muhimbili, Temeke and Ilala. The Temeke clinic was begun in March and was immediately very popular. This is a mixed ante-natal and child welfare clinic and an extra morning had to be allotted due to the large numbers attending. The numbers of women delivered at home continued to increase steadily, although staff is still insufficient for the service.

113. The number of beds for tuberculosis patients at the Infectious Diseases Hospital was increased by eight during the year. The leprosy in-patients decreased, but the numbers attending the out-patient clinic are more than last year.

114. The general and physical health of the patients at Msasani Mental Hospital is reported as being good. The Specialist Psychiatrist from Dodoma visited the hospital periodically and was of great assistance in reviewing long-term mental patients and in examining those under observation. Discussions were held during the year with a view to improving accommodation, but in view of the fact that a new Mental Holding Unit is to be constructed as part of the new Group Hospital, it was considered that the cost was not justified.

115. Four pieces of valuable new equipment were received during the year by the Physiotherapy Department. The bulk of the work was in connection with orthopaedic surgery at the Sewa Haji Hospital. A weekly clinic was also held there for cases of anterior poliomyelitis. This was under the direction of the Surgical Specialist, assisted by a health visitor who maintains contact between the patients and the Unit.

116. The hospitals within the Dar es Salaam Group were indebted to the Tanganyika Branch of the British Red Cross Society for many valuable services during the year. The Society assisted in the provision of twenty-nine artificial limbs for legless patients, some of which were sent to up-country district hospitals, where they were assembled locally. Occupational therapy and various diversional activities were among the assistance rendered to patients in hospital. These were much appreciated.

117. During the year two radiology units were working at the Ocean Road and the Sewa Haji Hospitals. In addition, some screening of tuberculosis cases was carried out at the Infectious Diseases Hospital. The amount of work has increased considerably, particularly at the Sewa Haji Hospital and keeps two radiographers fully occupied. No new major equipment was acquired during the year. In October, a medical officer returned after a year's radiological studies at Edinburgh to complete his second year's practical studies with the department. As before, the department remained under the direction of a Medical Specialist.

(B) DISTRICT HOSPITAL SERVICES

Eastern Region

118. Hospitals with registered or licensed practitioners in charge are:—

Eastern Province:
Morogoro
Kilosa
Mahenge
Bagamoyo
Utete

Southern Province:
Lindi
Nachingwea
Mtwara
Songea
Kilwa
Tunduru

119. The amount of surgical work at Morogoro Hospital continued to increase: otherwise the sickness treated was similar to that of previous years. A blood transfusion service started during the year; almost all donors were European, as Africans are still reluctant to participate.

120. The electricity supply paid for by the general public of Kilosa was installed and is working satisfactorily. Work was very heavy during the year, largely due to the arrival of many starving Wagogo from Central Province. As a result of this many cases of malnutrition and its complications were seen. At Mahenge it has not yet been possible to augment the water supply by means of an underground tank because of the unexpectedly high estimate of cost.

121. The new quarter for the Assistant Surgeon at Utete was completed and occupied. The work at this hospital is still increasing.

122. At Bagamoyo funds have been made available for the removal of the dangerous upper storey of the hospital, and the construction of a house in the hospital grounds for the assistant surgeon in charge. In Mafia the

activities of the D'Arcy Shell Exploration Co., resulted in an increased amount of work at the dispensary. It has not been possible to continue the regular two-monthly visits, although a Medical Officer from Morogoro has visited the island on several occasions.

123. The new hospital at Lindi was opened in July and is already full to capacity. The new maternity and child welfare clinic was also opened on the arrival of a health visitor in March and quickly gained popularity.

124. Electricity was installed at the hospital in Mtwara during the year, and the X-ray plant brought into use. A new labour ward, medical officer's office, waiting room and store have been built. Water-borne sanitation has now been installed for all wards. In spite of the transfer of a surgeon, Nachingwea has remained busy. In particular, much X-ray work was done at this hospital, as it is one of the only two hospitals in the Southern Province with an X-ray machine in working order.

125. At Songea, a new kitchen was installed and the old isolation ward has been overhauled and brought into use again.

126. At Kilwa, the hospital remained at Kilwa Kivinje where it will stay until there has been sufficient movement of population to Kilwa Masoko to justify its removal.

Western Region

127. Hospitals with registered or licensed practitioners are as follows:—

Lake Province:
- Mwanza
- Bukoba
- Musoma
- Shinyanga
- Biharamulo
- Shanwa

Western Province:
- Tabora
- Kigoma
- Nzega
- Kahama
- Kibondo
- Sumbawanga

128. A new prison ward was completed and occupied at Mwanza Hospital during the year. A site for the new Mwanza hospital was decided upon and application was made for its allocation.

129. The conversion of the old maternity ward at Bukoba into a European/Asian holding ward was completed during the year and brought into use. A new isolation ward and prison ward were also opened.

130. At Musoma, two temporary wards were condemned as unsafe and closed. This made the accommodation of patients extremely difficult and it is hoped that the wards will be replaced soon. The electricity supply was extended to the European wing, African labour ward and administration block.

131. The new isolation ward already built at Tabora was opened and a prison ward completed and occupied. An extension to the operating theatre was added.

132. At Nzega, the building of the new hospital progressed. The kitchen/laundry block and the mortuary were completed during the year, but the buildings were not brought into use except to accommodate poliomyelitis patients during the epidemic.

133. The new site for Kibondo hospital was finally agreed upon and re-roofing of the store carried out. Building at Sumbawanga progressed very slowly during the year. In December it was decided that the Public Works Department should take over and complete the buildings.

Central Region

134. Hospitals with registered or licensed practitioners are as follows:—

Southern Highlands Province:
- Mbeya
- Iringa
- Tukuyu
- Chunya

Central Province:
- Dodoma
- Singida
- Kongwa
- Kondoa
- Mpwapwa

135. At Mbeya, a twenty-six-bed ward at the African Hospital was built during the year.

136. Building of the new hospital at Njombe continued during the year.

137. Sanitary facilities at Iringa proved inadequate to deal with the increased in-patient accommodation.

138. Both the African and European wings were extended during the year at Dodoma.

Northern Region

139. Hospitals with registered or licensed practitioners are as follows:—

Northern Province:
- Arusha
- Moshi
- Mbulu
- Monduli

Tanga Province:
- Tanga
- Korogwe
- Lushoto
- Muheza
- Pangani

140. Considerable progress was made in the construction of a new ward to replace the old Askari ward at Arusha Hospital, and the extensions to the non-African wing proceeded.

141. Moshi is now one of the busiest stations in the territory. The out-patient department and ward accommodation were filled to capacity during the year. Some idea of the call on the accommodation can be gained from the fact that most cases of pneumonia could be kept in hospital for about three days only. The new twenty-six-bed ward was opened in October. The intention was to use it for children, but this had to be abandoned because of the acute congestion in the male African wards. The drainage system of the hospital was grossly overloaded and the Public Works Department were constantly at work building emergency soakage pits.

142. At Mbulu, three wards were completed and the theatre X-ray and administration blocks were nearly ready at the end of the year.

143. At Oldeani, the old school buildings are now in use together with a new kitchen, isolation block and mortuary. The hospital at Monduli was over-crowded as in previous years.

144. At Tanga, the out-patient department at Ngamiani was opened in July. The attendances rose rapidly until they reached nearly 10,000 a month. This strained the resources of the departmental staff to the utmost. There was a temporary fall in attendances at Tanga hospital after Ngamiani was opened, but the numbers there are again on the increase. The Assistant Director of Medical Services remarked that a new section of the Tanga population had apparently discovered the Medical Department. The Infectious Diseases Hospital at Tanga performed useful service, although it was not possible to accommodate female patients.

145. The new X-ray apparatus at Lushoto proved very valuable, both in the diagnosis of fractures and in the control of tuberculosis patients transferred from Kibongoto.

(C) SPECIAL HOSPITALS

Tuberculosis Hospital, Kibongoto

146. Although the accommodation at Kibongoto remained at the figure of 230 beds, the daily average number of in-patients, excluding those in the general wards, was 282, an increase of 26 over the 1953 figures. The Senior Specialist, in his annual report, noted that the type of case was still as severe as ever. Admissions during the year were 83 more than the year before. The results of treatment showed an improvement on the previous year. The average case continued to be of the advanced type. Nevertheless, an analysis of 392 pulmonary tuberculosis patients shows that on discharge 150 were converted AFB negative, i.e. thirty-eight per cent, and 98 were discharged improved, but still AFB positive.

147. The distribution of patients admitted to Kibongoto during the year continued to be the same as in previous years. Wachagga and other tribes of the Northern Province continued to make up the majority of the patients as before, but Africans were admitted from as far afield as Kenya, Zanzibar and Northern Rhodesia.

ADMISSIONS, DISCHARGES AND DEATHS

Total cases admitted	682
Pulmonary tuberculosis cases discharged	519
Non-pulmonary tuberculosis cases discharged...	108
Deaths from pulmonary tuberculosis	30
Deaths from non-pulmonary tuberculosis	1
In-patients remaining (30th November)	316

Mirembe Hospital, Dodoma

148. There was a further increase in the total number of patients in Mirembe Hospital during 1954. The figure rose to 405 which is an increase of 81 patients over 1953. The number of admissions rose to 306 compared with 235 for 1953. This is an increase of 71. (It should perhaps be noted that the number of admissions during 1954, i.e. 306, approaches the total number of patients remaining in hospital on 30th November, 1953, i.e. 324). The number of discharges, transfers, etc., rose to 172 compared with 146 in 1953. 11 patients were transferred to Lutindi and there were 3 escapes. The number of deaths remained high at 56 compared with 43 deaths in 1953. Many of the deaths were due to pulmonary tuberculosis (15) but

there were 8 deaths from bacillary dysentery and 6 patients died from senility. The figure of 56 deaths is high and represents 8·8 per cent of the total turnover of 630 patients in Mirembe during 1954. The corresponding percentage in English Mental Hospitals is 7·9 per cent. (Board of Control, Annual Report, 1953). The general health of the patients was fairly good, but many patients were admitted almost moribund from fever, toxaemia, malnutrition, or other "organic" conditions. It often took many months to nurse them back to physical health. Usually, when the physical condition improved, so did the mental condition. For example, 40 male patients who were classified as "organic" were discharged during 1954. Of these patients, 31 had been admitted during 1954.

149. The water shortage was not felt so acutely during 1954 as in 1953. Water was unrationed during the year. There were no epidemics of fly-borne disease, but bacillary dysentery remained endemic.

Leprosaria

150. The number of leprosaria affording in-patient facilities for treatment remained the same as last year, except for the addition of a new centre in the Southern Province. This is situated at Mkunya in Newala District. So far the native authorities have built a hospital, dispensary, stores and housing for eighty patients. Owing to staff difficulties it was not possible to begin treatment before the end of the year.

151. At Chazi a Red Cross babies' home was opened during the year and thirty-five houses for patients built. The water supply intake, main and storage tank were also completed. As food was the most expensive item on the budget, the hospital shamba was enlarged in the hope that a larger proportion of the food required could be produced by the patients.

152. At Makete the building of the hospital which is being constructed out of funds given by the British Red Cross Society was almost completed by the end of the year. The water supply was still under construction. Of the buildings already erected, the maternity ward and male ward were occupied and the female ward was almost ready at the end of the year. Part of the administration and treatment block was in use and the laundry/kitchen block was almost completed. Apart from these permanent buildings, temporary staff quarters, children's homes, a reception unit, and fifteen houses of which ten were for women patients, were all put up during the year.

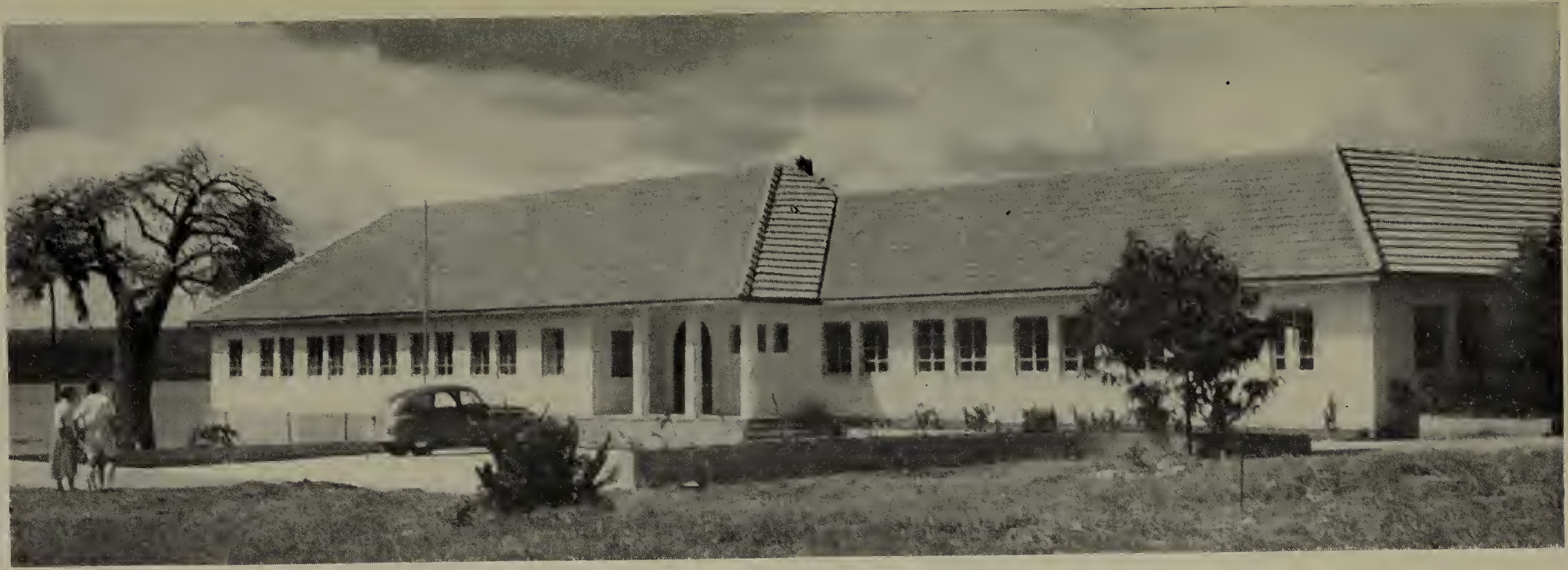
XIII.—RURAL MEDICAL SERVICES

153. The supervision of both Government and Native Authority dispensaries was much improved during the year, and in the majority of districts was done on a planned schedule. In continuance of the policy of improving existing services before permitting expansion, very few new dispensaries were added.

154. In the Western Region native authority ambulance services were extended. By the end of the year all districts of the Western Province had their own ambulances and in the Lake Province only Ngara was without one.

155. As detailed elsewhere in the report, a beginning was made in many districts in the out-patient treatment of leprosy sufferers.

156. The standard drug and equipment schedules were in use throughout the year and proved most successful.



New Hospital, Lindi—Outpatient Department

Mweka Nursing Training Centre—Students' class

XIV.—PATIENTS AND DISEASES TREATED

157. As the complete figures for the year were not available when this report was written, only general impressions can be given. On the whole the general pattern of sickness and mortality remained much the same. An exception to this was in the famine areas of the Central Province.

158. The mortality figures for Dodoma General Hospital are of interest in this respect. In 1954 the main causes of death were gastro-enteritis, allergic and endocrine diseases, pneumonia, malaria, diseases of the digestive system, ulcers, anaemia, senility and pulmonary tuberculosis in that order. In contrast, in 1953 the commonest causes were lobar pneumonia, gastro-enteritis, pulmonary tuberculosis, bronchial pneumonia, vitamin deficiency and heart disease in that order.

159. From the Northern Province, no change is reported, except that the number of cases of tuberculosis seems to have increased.

160. In Morogoro Township it was reported that the number of cases of malaria had once again dropped very considerably. In the Southern Province pulmonary tuberculosis was said to be widespread, particularly in the coastal areas.

161. From some regions an increase of venereal disease was noted. It is not known whether the incidence is greater or if more people came to hospital for treatment.

XV.—SPECIALIST SERVICES

(A) Medical

162. The post of Radiologist was still not filled during the year, and consequently a medical specialist with a radiological diploma remained in charge of radiological work in Dar es Salaam. The division of duties between the two medical specialists was as in previous years.

163. The studies of anti-malarial drugs were continued. As a result of these it appeared that so far as Tanganyika was concerned, pyrimethamine (daraprim) has no advantage over other drugs in the treatment of malaria. Reliance on a single dose for prophylaxis is not justified by results. The various forms of chloroquin continued to be used and were reported as satisfactory.

164. The conclusion was reached that the use of sulphaguanadine in dysentery was of little value except in enormous doses. With children a much better and more rapid response was achieved by the administration of streptomycin by mouth. An abnormal number of cases of brain tumour were noted during the year. One was transferred to India and operated on successfully, but the others proved fatal.

165. The newer penicillins on the market were investigated during the year to compare their effectiveness in the treatment of syphilis and yaws.

166. Several cases of undulant fever were reported, but the results of treatment were poor. More and more cases of osteitis of a type as yet not definitely identified were found. Trials were continued with drugs for the treatment of leprosy at the Infectious Diseases Hospital. It became quite clear that the combined treatment, either by sulphone and hydno-carpus, or sulphone and isonicotinic hydrazide was very much better than any one drug. Almost no reactions were reported as a result of this treatment.

(B) SURGICAL

167. Both the posts of surgical specialist were filled during the year. Much of their work was taken up in the training of medical assistant students, pre-registration doctors and newly-qualified medical assistants.

168. Following the appointment of a specialist anaesthetist, major thoracic surgery was carried out during the year. A tumour of the mediastinum and a hydatid cyst of lung were both successfully removed. Bronchoscopy was performed in sixteen cases, and phrenic crush or avulsion on thirteen patients suffering from pulmonary tuberculosis. Three cases of apico-lysis through a formal thoracotomy were performed. The results were encouraging and the patients stood this latter operation much better than thoracoplasty.

169. As in previous years, much orthopaedic work was carried out.

170. It was observed that cases in the Sewa Haji Hospital of arthritis of spine, hip and knee did not agree either in the radiological appearance or clinical course with tuberculous arthritis as seen and described in Europe.

171. At the Ocean Road Hospital, as in previous years, gynaecological and obstetrical operations comprised the major part of the surgical work undertaken. Surgical operations totalled 350.

172. At the Sewa Haji Hospital, 4,272 operations were carried out during the year, of which 2,345 were performed in the out-patients theatre and 186 at the Ilala Clinic.

(C) OPHTHALMIC

173. Of the two ophthalmic specialists stationed in Dar es Salaam, one acted as a medical officer in charge of the Ocean Road Hospital for ten months of the year. The other specialist spent four and a half months on safari. Operative surgery of the eye was carried out at many district hospitals where such procedures had not previously been attempted.

174. The extraction of cataract and entropian were the commonest operations. Enucleation of blind, painful eyes and for new growths was frequently necessary. It was observed that squints were hardly ever seen, and cases of glaucoma rarely reported until they were beyond operative help.

175. At the Sewa Haji Hospital 5,219 new cases were seen, with a total of 15,814 attendances. Of these, 795 cases were of trachoma. At the Ocean Road Hospital 700 cases were seen during the year.

(D) DENTAL

176. Due to shortage of staff the Mwanza unit was closed until December, and the Mbeya one from March until October. An effort was made to use the services of a Kenya dental surgeon in the Lake Province, as a temporary measure. One vacancy was filled in October, and a second vacancy was filled on a temporary basis for six months. All stations were visited during the latter part of the year. The work at the Sewa Haji Hospital increased, the monthly attendance for treatment being about 750 cases. In addition, there was much more maxillo-facial work done, which occupied a considerable time.

177. Representations were made regarding the addition of fluorine to Dar es Salaam water supplies to assist in preventing caries. When further information is available this policy will be considered in more detail.

(E) MENTAL

178. The acting Specialist Psychiatrist was in charge of Mirembe Hospital, Dodoma, during the year. As in previous years visits were made periodically to Lutindi and Msasani Mental Hospitals.

(F) ANAESTHETIC

179. The number of major operations increased during the year. The work was severely hampered by the lack of adequate blood transfusion facilities. A scheme was proposed during the year, but owing to a shortage of staff at the Sewa Haji Hospital could not be started.

180. Anaesthetic apparatus gave rise to some trouble during the year as some types were unsuitable for the tropics, while others showed rapid deterioration of the working parts, again due to the climate.

(G) TUBERCULOSIS

181. Specialist services were maintained at Kibongoto Tuberculosis Hospital throughout the year; an account of the work is given elsewhere.

(H) SLEEPING SICKNESS

182. As the Western Province remained the main focus of the disease, the Specialist maintained his headquarters at Tabora. A few beds were made available at Tabora Hospital for the treatment of cases and the clinical trials of new drugs.

PART IV.—ANCILLARY AND RELATED SERVICES

XVI.—LABORATORY SERVICES

183. A detailed account of these services is given in the Annual Report of the Medical Laboratory which is published separately.

XVII.—MEDICAL TRAINING

184. No new courses were introduced during 1954, but there was an increase in the number of nurses, rural medical aids and assistant health inspectors under training. One additional mission hospital was approved as a nursing training centre. The total number of students in Government and grant-aided mission training centres amounted to 692 (395 in Government centres and 297 under training in mission hospitals).

185. Students completed training and qualified in the territorial examinations as follows (comparative figures for 1953 are shown in brackets):—

	Government Centres	Mission Centres	Total
Medical Assistants	12 (8)	7 (9)	19 (17)
Laboratory Assistants	2 (5)	–	2 (5)
Pharmaceutical Assistants	2 (4)	–	2 (4)
Hospital Steward Assistants	1 (–)	–	1 (–)
Rural Medical Aids	11 (6)	10 (7)	21 (13)
Assistant Health Inspectors	7 (–)	–	7 (–)
Health Orderlies	17 (14)	–	17 (14)
Health Nurses	6 (9)	–	6 (9)
Malaria Assistants	6 (3)	–	6 (3)
Nurses	34 (33)	25 (46)	59 (79)
Midwives	15 (18)	17 (17)	32 (35

186. The first students to complete the three-year course for assistant health inspectors at Kongwa qualified in December. Seven out of ten candidates were successful in the territorial examination, but all subsequently passed the qualifying examination of the Royal Sanitary Institute conducted under the auspices of the Joint East African Examining Board. Additional hostel buildings were taken over at the beginning of the year, and the centre can now accommodate a total of 138 health and nursing students.

187. As forecast in last year's report, there was an intake of twenty students to the Government training centre for rural medical aids at Mwanza, i.e. double that of previous years. In order further to increase the training of this category of medical aid for work in rural dispensaries, plans have been made for future courses to receive the second year of training in selected district hospitals. This will permit the size of the annual intake to Mwanza to be doubled again in 1956, and there should thus be a maximum output of forty Government trained rural medical aids in 1957 and annually thereafter. Courses for tribal dressers were held during 1954 in a number of district hospitals.

188. The Nurses and Midwives Council met twice during the year. Regulations under the Nurses and Midwives Ordinance were drawn up and were subsequently published as The Nurses and Midwives Registration Regulations, 1954 (Government Notice No. 196 of 1954). In addition to its duties in connection with the registration of nurses and midwives, the Council issued a Guide to the nursing training syllabus and approved various amendments to the regulations for training. The Tanganyika Medical Training Board also met twice, and revised the training regulations for medical assistants, rural medical aids and assistant health inspectors. The appointment of examiners and the arrangement of territorial qualifying examinations for all types of nursing, medical and health students was carried out under the ægis of these two bodies.

189. During 1954 eleven mission medical and nursing training centres received training grants-in-aid from central Government. The total disbursed on these grants during the financial half year January to June, 1954, amounted to £7,610.

XVIII.—MISSION MEDICAL SERVICES

190. Grants paid to medical missions under the Medical (Grants-in-Aid to Missions) Regulations, 1952, were distributed between seventy-six hospitals and bedded dispensaries, and amounted to £53,778 15s. during the financial half year January to June, 1954. In addition, as forecast in the 1953 report, a number of rural dispensaries which had previously been subsidized by the central Government received grants from the local native treasuries.

191. New mission hospitals under construction during the year included those at Ihanja in Singida District (Augustana Lutheran), Haydom in Mbulu District (Norwegian Lutheran), Rulenge in Ngara District and Kabanga in Kasulu District (White Fathers), Ifakara in Ulanga District (Capuchin) and Makiunga in Singida District (Medical Missionaries of Mary). Good progress was made in the building of new leprosaria by the Mennonite Mission near their Shirati Hospital in North Mara District and by the Moravian Mission in conjunction with the Native Authority at Sikonge in Tabora District. A number of improvements were made to existing hospitals and leprosaria.

192. In addition to the hospital grants-in-aid and grants to approved medical and nursing training centres, missions receive grants from the Medical Department towards the upkeep of their leprosaria, and anti-leprotic drugs are issued free for the treatment of both in- and out-patients. Government policy for the development of out-patient leprosy services has been mentioned elsewhere in this report. During 1954 a number of missions have continued the work of building up effective leprosy out-patient services; notably the U.M.C.A. in Masasi and Newala Districts, the Seventh Day Adventist Mission in Kasulu District and the Benedictines at Ndanda.

193. Particulars of the medical and training grants-in-aid paid to individual missions during the financial half year January to June are given below. These figures are exclusive of grants paid for the upkeep of mission leprosaria and grants paid by native authorities.

Mission	Grants for Medical Work £	s.	Grants for Training £	Total £	s.
U.M.C.A. Zanzibar Diocese	7,007	10	1,345	8,352	10
Church Missionary Society	5,260	0	2,275	7,535	0
U.M.C.A. Masasi Diocese	5,125	0	540	5,665	0
Lutheran, Usambara Area	3,705	0	1,260	4,965	0
Benedictine, Peramiho	4,220	0	250	4,470	0
Benedictine, Ndanda	3,182	10	765	3,947	10
White Fathers, Mwanza	2,698	15	675	3,373	15
Moravian	3,132	10	–	3,132	10
Augustana Lutheran	2,846	5	250	3,096	5
Church of Sweden	2,415	0	250	2,665	0
Mennonite	1,837	10	–	1,837	10
Lutheran, Northern Area	1,820	0	–	1,820	0
U.M.C.A. South-West Tanganyika	1,697	10	–	1,697	10
Capuchin	1,450	0	–	1,450	0
Catholic, Ndareda	1,412	10	–	1,412	10
Swedish Evangelical Society	1,406	5	–	1,406	5
White Fathers, Bukoba	1,162	10	–	1,162	10
Africa Inland Mission	1,125	0	–	1,125	0
White Fathers, Kigoma	1,125	0	–	1,125	0
Seventh Day Adventist	1,012	10	–	1,012	10
Norwegian Lutheran	137	10	–	137	10
Totals	53,778	15	7,610	61,388	15

XIX.—RESEARCH

Sleeping Sickness

194. Investigations into the use of Mel. B. and melarsen sodium were continued during the year among patients at Tabora Hospital. The results of the year's treatment with the new drugs have not yet been analysed, as many cases were not seen again for follow-up before the end of the year. It was noted, however, that there were only fourteen deaths among the sleeping sickness patients at Tabora in the first eleven months of the year, and only four of these deaths were associated with Mel. B. or melarsen sodium treatment. These drugs are only given to those otherwise incurable. Small supplies of Mel. B. were made available to Kibondo, Biharamulo and Lindi hospitals. It is stated that this drug has now proved of great value for the treatment of advanced cases of sleeping sickness.

Malaria

195. As in past years, a number of experiments connected with malaria were carried out under the supervision of the Inter-territorial Malariologist at Amani.

196. *Mosquito Susceptibility to Insecticides.*

(a) D.D.T. and dieldrin in acetone and oil suspension and solution were tested in the laboratory against larvae of *A. gambiae.* From these tests it appeared that *A gambiae* was relatively resistant to D.D.T.; that in acetone suspension dieldrin is six times as toxic as D.D.T. to larvae, and that in oil solutions this difference is more marked.

(b) D.D.T. and dieldrin in oil solution were again tested under semi-natural conditions in the field against larvae of *A. gambiae.* The results suggested that the known discrepancy between laboratory and field results, when insecticides were used routinely, might be attributed to failure in the application of the correct dosages.

(c) Dieldrin was further tested in granulated form as a mosquito larvicide. The results show that the minimum lethal dose of one per cent pellets to fourth stage larvae of *A. gambiae* is about five ounces to the acre. Similar tests on natural ponds led to the conclusion that chemical factors present there reduced the efficacy of dieldrin. A residual effect after prolonged drying out of the pools due to absorption of dieldrin by the soil was also noted.

197. *Mortality Rates in Mosquitoes.*—Mortality rates of *A. gambiae* adults, using the sporozoite rates as indices, appear to vary from the coastal area to the dryer inland regions. The variation in the sporozoite rates appears to be independent of parasite density in man, and it is probable that climatic factors, in particular humidity, may be the determining agents. Investigation of the subject was carried out by:

(i) establishing the mean level of the sporozoite rate in a variety of localities at different seasons of the year;

(ii) collection of data to determine whether the sporozoite variations are affected by reduced human infectivity, deviation to animal hosts, reduced feeding frequency, etc., and

(iii) estimation of mosquito mortality rates.

198. *Malaria Parasite Resistance to Pyrimethamine.*—The work begun in 1953 was concluded early in 1954. The inhabitants of two villages were given pyrimethamine under direct supervision once monthly for six months. After three months parasite rates began to climb, and after six months high rates were seen in one community, the asexual parasites being shown to be resistant to heavy dosages of pyrimethamine, but not to other anti-malarials such as amodiaquin. Spread of the insusceptible *p. falciparum* parasites to other communities was not found and when left to itself the strain appeared to die out. In view of the importance of these findings a larger scale investigation has been begun using weekly prophylactic pyrimethamine following an initial dosage with amodiaquin or chloroquin. These enlarged investigations combine work in other fields, and data such as vital measurements and statistics are being collected simultaneously.

199. *Human Feeding Preferences of Anopheline Mosquitoes.*—An investigation was begun to determine whether malaria carrying mosquitoes have preferences for humans of different ages. Such age preference might have a bearing on the transmission of the disease. The data obtained from dissecting 400 mosquitoes in twenty night catches appeared to indicate that random feeding occurred, women and young children being excepted.

200. *Control of Bilharzia and Malaria in Dams.*—Under the guidance of the Director of the East Africa Malaria Unit, a large-scale investigation was begun to try to determine the relevant control factors involved in the case of the many dams being constructed in the Lake and Western Provinces. The investigation concerns:

(i) an analysis of the fish populations concerned in mosquito larval and snail control;

(ii) the types of vegetation in dams, and

(iii) methods for protecting dams from damage due to migrating cattle.

MENTAL

201. During 1954 aptitude testing of Africans was begun. The tests used were those standardised by the South African National Institute of Personnel Research.

202. A small controlled experiment was also carried out to observe any possible difference in the effects of the drug mescaline on Africans compared with Europeans. This drug belongs to the "phantastica" group of drugs and is of great psychiatric interest. Full results of this experiment will be published later.

TUBERCULOSIS

203. The Senior Specialist reports that the tuberculin testing of schoolchildren produces considerable information, both on the state of infectivity among children at any given time, and the amount of blister reactions. The blister reaction to the graded tuberculin tests is regarded as evidence of recent infection. The use of a formula used by the Senior Specialist in connection with this reaction is likely to be of great value for estimating the incidence of infectious cases of tuberculosis in a given community without the disclosure of actual cases. In 1954, apart from the B.C.G. vaccination experiments carried out in Kibongoto village, 7,368 schoolchildren were tuberculin tested by the graded tuberculin test in six main districts of Kilimanjaro. Using the trial formula as mentioned above to gauge the incidence of infectious cases, the results for Kilimanjaro indicated the presence of seven per thousand. This is a very likely figure, comparing it with the eleven per thousand for Mbulu (1948). In Upare, 2,000 odd children were tested in 1954. Again, applying the formula the incidence per thousand proved to be 4·7. This is probably the correct figure as the number of cases is definitely less than on Kilimanjaro.

HEALTH SURVEYS

204. During 1954 detailed health surveys were carried out in the Lake Province by the East Africa Medical Survey. Ukara Island, the site of one investigation, has only thirty-six square miles, but supports a population of 16,500. The people were found to be heavily infected with many parasites. Half of the young people harboured malaria parasites in their blood; thirty-six per cent of the adults had microfilaria; fifty-six per cent had roundworms; thirty-eight per cent had hookworms and thirty-eight per cent *S. mansoni* (bilharzia). There was serological evidence of syphilis in fifteen per cent, while haemoglobin levels were consistently below the normal for western Europeans.

205. Despite these findings, the Wakara appeared to be in excellent physical health. Their weight/height ratios were high; they showed no obvious signs of under-nutrition, and were a happy hard-working people. Because of the pressure of population on the land, a unique and highly efficient system of intensive agriculture has been evolved which, at present at any rate, clearly meets the food requirements. With a net reproduction rate of 1·4 the population will, however, continue to increase, and resettlement will eventually be necessary. At Kwimba, the second area visited, the population is sparse, and large herds of stock are kept. For many months of the year the country is dry and there are seasonal food shortages. The only parasites causing heavy infestation of the population were hookworm (forty-five per cent) and urinary bilharzia (*S. haematobium*). In the latter case seventy-two per cent of children

were infected and twenty-two per cent of the adults. About fifteen per cent of the population showed evidence of syphilis by the Kahn reaction. There are many restrictions and taboos on the consumption of food and the large herds of stock are not regarded as a source of food. Many children showed signs of defective nutrition.

206. An especially interesting finding during the course of this survey was that despite the heavy infestation with urinary bilharzia—even with blood appearing in the urine—the childrens' studies in a high proportion of cases did not suffer as a result. Infected children were not at a disadvantage in this respect when compared with those not harbouring parasites. Another interesting finding was the lower percentage of infestation among older children and adults, even without treatment.

207. These findings suggested a natural growth of tolerance or immunity around puberty, and although there is not yet sufficient data on which to base reliable conclusions, doubts are raised as to the necessity of large-scale treatment campaigns amongst schoolchildren under conditions prevailing in the area surveyed. It is not yet known whether higher intensities of bilharzia infestation, such as may be produced by controlled conservation of water supplies without corresponding sanitary precautions, will overcome the natural resistance to lighter infestations and the ability to develop tolerance to the parasite with increasing age.

208. An interesting feature of the Bukoba survey, the third area visited, was the low net reproductive rate of 0·8 per cent compared with the high rate of 1·4 per cent on Ukara Island. That is to say, the people of Bukoba District are not at present maintaining their numbers by reproduction. This has been suspected for some time, the most favoured explanation hitherto being the high incidence of venereal disease prevailing among the Wahaya. Investigations did not reveal any evidence to support this view. For example, the incidence of syphilis and gonorrhoea is probably as high among many other tribes in whom reproduction rates are high.

209. It was concluded that there is no justification at present for instituting large-scale campaigns against venereal disease.

XX.—MEDICAL STORES

210. A Chief Storekeeper was appointed during the year. This will relieve the Chief Pharmacist of much of his routine work.

211. The Instrument Mechanic went on vacation leave in November. An assistant is carrying on his work, but there will inevitably be an accumulation of instruments requiring repair when he returns.

212. The Hollerith system of accounting was introduced during the year. This has caused some difficulty and confusion as, among other things, it has meant changing the nomenclature of the various sections.

213. With the exception of a very few items, it was possible to comply with most requests from district hospitals. The ordering of supplies was made difficult by demands for drugs which in many cases bore no relation to issues in previous years which form the normal basis whereby replacements are ordered.

BUREAU OF HYGIENE & TROPICAL DISEASES
2[illegible] MAY 1955

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TANGANYIKA

Annual Report
of the
Medical Department
1954

Volume II
(Statistics)

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Volume II

(Statistics)

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PART I

Staff

TABLE I

ESTABLISHMENTS

(As at 31st December, 1954)

Headquarters and Administration

1 Director of Medical Services.
1 Deputy Director.
5 Assistant Directors.
1 Matron-in-Chief.
1 Secretary.
1 Accountant.
1 Assistant Accountant (vacancy).
5 Women Administrative Assistants (1 vacancy).
5 Stenographers.
2 Temporary Stenographers.
16 Temporary Clerks.
1 Librarian.
118 Clerks (11 vacancies).

Stores and Pharmaceutical Services

1 Chief Pharmacist.
1 Chief Storekeeper.
5 Pharmacists (1 vacancy).
1 Instrument Mechanic.
6 Stores Assistants (4 vacancies—2 filled by Temporary staff).
3 Pharmaceutical Assistants.
1 Head Packer.

Hospital and Health Services

6 Senior Medical Officers.
2 Hospital Superintendents.
7 Specialists (2 Medical, 2 Surgical, 2 Ophthalmic, 1 Anæsthetist).
66 Special Grade Medical Officers and Medical Officers (7 vacancies—2 filled by Temporary staff).
8 Matrons.
121 Nursing Sisters (47 vacancies—37 filled by Temporary staff).
5 Sister Housekeepers (3 vacancies—all filled by Temporary staff).
4 Physiotherapists.

1 Male Nurse.
3 Stewards (1 vacancy).
1 Chief Health Inspector.
35 Health Inspectors (6 vacancies).
19 Health Visitors (2 vacancies).
2 Senior Assistant Surgeons.
22 Assistant Surgeons (4 vacancies—3 filled by Temporary staff).
12 Senior Sub-Assistant Surgeons.
21 Sub-Assistant Surgeons.
9 Medical Officers (East Africa) (2 vacancies).
8 Hospital Steward Assistants (2 vacancies).
152 Medical Assistants (21 vacancies).
6 Senior Compounders.
2 Compounders.
19 Pharmaceutical Assistants (4 vacancies—1 filled by Temporary staff).
300 Trained Nurses and Midwives (120 vacancies).
12 Ambulance Men (12 vacancies).
14 Motor Drivers (2 vacancies).
17 Assistant Health Inspectors (11 vacancies).
66 Sanitary Inspectors (3 vacancies).
24 Health Nurses (15 vacancies).
6 Hospital Porters (6 vacancies).

Dental

1 Senior Dental Surgeon.
5 Special Grade Dental Surgeons and Dental Surgeons (1 vacancy—filled by Temporary staff).
1 Senior Dental Mechanic.
1 Dental Mechanic.
2 Dental Auxiliaries (1 vacancy).

Leprosy

2 Medical Officers.
3 Leprosy Nurses.

Malaria

2 Entomologists (1 vacancy).
5 Malaria Field Officers (1 vacancy).
31 Malaria Assistants (11 vacancies).
1 Junior Draughtsman.
14 Malaria Auxiliaries (3 vacancies).

Mental

1 Specialist (vacancy).
2 Chief Male Mental Nurses.
4 Male Mental Nurses.
6 Female Mental Nurses.
2 Medical Assistants.
3 Male Nurses (1 vacancy).
1 Female Nurse (vacancy).

Tuberculosis

1 Senior Specialist
1 Medical Officer.
1 Industrial Instructor.
2 Nursing Sisters (1 vacancy).
3 Medical Assistants (1 vacancy).

Sleeping Sickness

1 Specialist.

Laboratory Services

1 Senior Pathologist.
2 Pathologists.
3 Laboratory Superintendents.
45 Laboratory Assistants (7 vacancies).
21 Laboratory Auxiliaries (5 vacancies).

X-Ray

1 Radiological Technician (vacant).
3 Radiographers.
3 Radiographer Assistants (1 vacancy).
1 Radiographer Auxiliary.

Medical Education

1 Senior Medical Officer.
1 Medical Officer (vacant).
1 Medical Instructor.
3 Wardens.
7 Sister Tutors (1 vacant).
3 Medical Assistants (1 vacant).

TABLE II

MORBIDITY AND MORTALITY—EUROPEAN OFFICIALS

Total number of European officials in Service (excluding High Commission) Staff List February, 1954	2,497
Deaths	8
Invalidings:	
(a) to United Kingdom	4
(b) within East Africa	–
Number admitted to hospitals	518
Number sick in quarters	204
Total number days off duty	3,551
Average days off duty per patient	6·33

Causes of Mortality and Morbidity:

(a) *Mortality:*

Disease:

1. Cardiac failure	4
2. Pulmonary carcinoma	1
3. Cancer	1
4. Severe injuries to the brain	1
5. Not available	1
	8

(b) *Morbidity* (diseases diagnosed:

Infective and Parasitic Dieases	220
Allergic Endocrine System, Metabolic and Nutritional Diseases, and Diseases of the Blood and Blood-forming Organs	14
Mental, Psychoneurotic and Personality Disorders	11
Diseases of the Nervous System and Sense Organs	9
Dieases of the Circulatory System	13
Diseases of the Respiratory System	124
Diseases of the Digestive System	89
Diseases of the Genito-Urinary System	18
Diseases of the Skin and Cellular Tissues and Diseases of the Bones and Organs of Movement	84
Symptoms, Senility and Ill-defined conditions	90
Accidents, Poisonings and Violence	50
Total	722

(c) *Principle causes of morbidity:*

Malaria (all forms)	136
Acute upper respiratory infections	90
Pyrexia of unknown origin	35
Infections of skin and subcutaneous tissue	32
Gastro-enteritis and colitis (acute)	28
Diseases of the skin (including ulcer)	27
Dysentery unspecified	24
Fracture of limbs	18
Influenza	16
Appendicitis	16
Amœbiasis	15

PART II

Training

TABLE III

MEDICAL TRAINING

Approved Medical and Nursing Training Centres

Category of Student	Training Centre	Training Authority	Length of Course (Years)	Total Students under training during 1954	Students Qualified 1954	Total Qualified in each category in 1954
Medical Assistants	Dar es Salaam	Government	3	39	12	19
	Bumbuli	Lutheran Mission	3	23	7	
Laboratory Assistants	Dar es Salaam	Government	3	9	2	2
Pharmaceutical Assistants	Dar es Salaam	Government	3	10	2	2
Hospital Steward Assistants	Dar es Salaam	Government	2	6	1	1
Rural Medical Aids	Mwanza	Government	2	35	11	21
	Minaki	U.M.C.A.	2	28	10	
Assistant Health Inspectors	Kongwa	Government	3	53	7	7
Health Orderlies	Kongwa	Government	1	20	17	17
Health Nurses	Tukuyu	Government	2	25	6	6
Malaria Assistants	Amani	Government	2	11	6	6
Nurses	Mweka (male and female)	Government	3	143	34	59
	Kongwa (male)	Government	3	24	–	
	Mvumi (male and female)	C.M.S.	3	47	11	
	Peramiho (male and female)	Benedictine	3	31	–	
	Mnero (male)	Benedictine	3	26	5	
	Magila (female)	U.M.C.A.	3	27	5	
	Lulindi (female)	U.M.C.A.	3	26	3	
	Sumve (female)	White Fathers	3	21	1	
	Kiomboi (male and female)	Augustana Lutheran	3	25	–	
	Ndolage (female)	Church of Sweden Mission	3	8	–	
Midwives	Dar es Salaam	Government	1 or 2	20	15	32
	Mvumi	C.M.S.	1 or 2	10	8	
	Ndanda	Benedictine	2	11	2	
	Magila	U.M.C.A.	1 or 2	5	5	
	Sumve	White Fathers	1 or 2	9	2	

PART III

Hospital and Dispensary Services

TABLE IV

GOVERNMENT HOSPITALS AND DISPENSARIES

As at 31st December, 1954

MEDICAL REGION AND PROVINCE	HOSPITAL	No. of Wards	Number and Category of Beds					
			General	Obstetrics	Tuberculosis	Infectious	Mental	Total
				I.—GENERAL HOSPITALS				
Dar es Salaam	Ocean Road	29	48	14	–	3	–	65
	Sewa Haji	8	300	–	–	–	–	300
CENTRAL REGION: *Central Province*	Dodoma	12	111	15	–	11	–	137
	Kondoa	10	33	3	–	10	–	46
	Kongwa	4	79	6	20	10	–	115
	Mpwapwa	3	26	–	–	–	–	26
	Singida	7	42	–	–	2	–	44
Southern Highlands Province	Mbeya	18	70	11	–	2	–	83
	Chunya	14	33	2	–	6	–	41
	Iringa	7	93	13	3	–	–	109
	Tukuyu	7	76	6	–	3	–	85
EASTERN REGION: *Eastern Province*	Morogoro	18	144	22	4	26	–	196
	Bagamoyo	6	30	5	–	4	–	39
	Kilosa	7	76	3	–	11	–	90
	Mahenge	10	78	–	–	–	–	78
	Utete	2	33	–	–	–	–	33
Southern Province	Mtwara	4	40	1	–	–	–	41
	Kilwa	5	30	–	–	6	–	36
	Lindi	6	88	–	–	4	–	92
	Nachingwea	6	77	–	–	–	–	77
	Songea	4	50	–	–	–	–	50
	Tunduru ..	5	24	–	–	–	–	24

TABLE IV—(*contd.*)

GOVERNMENT HOSPITALS AND DISPENSARIES

As at 31st December, 1954.

MEDICAL REGION AND PROVINCE	HOSPITAL	No. of Wards	Number and Category of Beds					
			General	Obstetries	Tubereu-losis	Infectious	Mental	Total
				I.—GENERAL HOSPITALS				
NORTHERN REGION: *Northern Province*	Arusha	14	112	14	–	6	–	132
	Mbulu	3	36	–	–	4	–	40
	Monduli	3	34	–	–	–	–	34
	Moshi	16	189	13	–	14	–	216
	Oldeani	16	59	1	–	5	–	65
Tanga Province	Tanga	22	285	7	–	–	–	292
	Korogwe	7	112	–	–	4	–	116
	Lushoto	8	39	4	–	2	–	45
	Muheza	8	84	–	4	10	–	98
	Pangani	10	18	6	–	2	–	26
WESTERN REGION: *Lake Province*...	Mwanza	28	159	29	7	1	–	196
	Bukoba	12	126	12	–	12	–	150
	Biharamulo	5	34	8	–	–	–	42
	Musoma	14	67	4	–	4	–	75
	Shanwa	4	24	4	–	2	–	30
	Shinyanga	5	62	4	–	2	–	68
Western Province	Tabora	17	193	17	–	6	–	216
	Kahama	5	46	15	–	–	–	61
	Kibondo	3	35	–	–	–	–	35
	Kigoma	6	56	6	–	–	–	62
	Nzega	7	44	–	–	–	–	44
	Sumbawanga	2	26	–	–	–	–	26
TOTAL—GENERAL HOSPITALS ...	44	407	3,421	245	38	172	–	3,876

TABLE IV—(*contd.*)

GOVERNMENT HOSPITALS AND DISPENSARIES

At at 31st December, 1954.

MEDICAL REGION AND PROVINCE	HOSPITAL	No. of Wards	Number and Category of Beds					
			General	Obstetrics	Tuberculosis	Infectious	Mental	Total
				II.—SPECIAL HOSPITALS				
Dar es Salaam	Infectious Diseases	26	–	–	85	80	–	165
	Muhimbili Maternity	4	–	41	–	–	–	41
	Msasani Mental	3	–	–	–	–	22	22
CENTRAL REGION: *Central Province*	Mirembe Mental	27	–	–	–	–	448	448
NORTHERN REGION: *Northern Province*	Kibongoto Tuberculosis	6	–	–	230	–	–	230
Tanga Province	Tanga Infectious Diseases	9	–	–	12	–	–	12
	Tanga Maternity	–	–	11	–	–	–	11
WESTERN REGION: *Western Province*	Nzega Maternity	4	–	30	–	–	–	30
TOTAL—SPECIAL HOSPITALS ...	8	79	–	82	327	80	470	959
				III.—DISPENSARIES				
CENTRAL REGION: *Central Province*	Itigi	3	8	–	–	–	–	8
	Manyoni	3	18	–	–	4	–	22
Southern Highlands Province	Kyela	3	18	–	–	2	–	20
	Malangali	5	23	–	–	–	–	23
	Njombe	3	20	–	–	2	–	22
	Makete	3	24	2	–	–	–	26

TABLE IV—(*contd.*)

GOVERNMENT HOSPITALS AND DISPENSARIES

As at 31st December, 1954.

MEDICAL REGION AND PROVINCE	HOSPITAL	No. of Wards	Number and Category of Beds					
			General	Obstetrics	Tuberculosis	Infectious	Mental	Total
				III.—DISPENSARIES				
EASTERN REGION:								
Eastern Province	Kingolwira	2	40	–	–	6	–	46
	Mafia	5	11	1	–	–	–	12
Southern Province	Liwale	4	24	–	–	–	–	24
NORTHERN REGION:								
Northern Province	Magugu	2	10	–	–	–	–	10
	Mwika	–	8	8	–	–	–	16
Tanga Province	Handeni	6	24	–	–	–	–	24
	Same	2	25	–	–	–	–	25
	Usangi...	5	36	–	–	4	–	40
	Tamota	–	24	3	–	4	–	31
WESTERN REGION:								
Lake Province...	Murongo	3	10	–	–	–	–	10
	Ngara	2	23	–	1	–	–	24
	Ngudu	2	16	–	–	–	–	16
	Tarime	1	10	–	–	–	–	10
Western Province	Mpanda	2	10	–	–	–	–	10
	Kakonko	2	16	–	–	–	–	16
	Kasanga	1	6	–	–	–	–	6
	Kassanda	1	2	–	–	–	–	2
	Kasulu	3	17	–	–	–	–	17
TOTAL DISPENSARIES ...	24	63	423	14	1	22	–	460
TERRITORIAL TOTAL ...	76	549	3,844	341	366	274	470	5,295

TABLE V

In-Patients—Government General and Special Hospitals and Dispensaries

(*Excluding Maternity and Child Health Centres*)

Figures refer to the twelve-month period 1st December, 1953—30th November, 1954

	Number admitted during the year (a)					Number discharged during the year					Deaths					Daily average in hospital				
	European		Non-European		Total	European		Non-European		Total	European		Non-European		Total	European		Non-European		Total
	M	F	M	F		M	F	M	F		M	F	M	F		M	F	M	F	
I. GENERAL HOSPITALS																				
CENTRAL REGION																				
Central Province ...	55	119	5,712	3,400	9,286	56	122	5,379	3,210	8,767	–	–	282	172	454	0·80	2·00	178·33	93·22	274·35
S. H. Province ...	159	161	4,494	4,159	8,973	161	157	4,405	4,055	8,778	3	1	122	113	239	4·08	3·85	137·39	108·44	253·76
EASTERN REGION																				
Eastern Province ...	61	62	4 853	2,218	7,194	58	59	4,671	2,121	6,909	2	–	251	80	333	1·50	1·25	201·31	63·17	267·23
Southern Province	81	87	4,455	1,943	6,566	78	87	4,350	1,869	6,384	1	–	86	35	122	1·62	2·19	178·26	80·89	262·96
NORTHERN REGION																				
Northern Province	261	308	9,556	5,152	15,277	253	309	9,051	4,847	14,460	5	3	438	267	713	5·33	6·19	262·51	139·73	413·76
Tanga Province ...	174	178	7,711	2,662	10,725	165	174	7,366	2,508	10,213	2	–	166	77	245	4·91	3·24	340·82	87·04	436·01
WESTERN REGION																				
Lake Province ...	85	85	9,878	6,459	16,507	77	81	9,591	6,204	15,953	4	1	313	235	553	0·99	1·51	324·06	142·70	469·26
Western Province	57	73	5,618	3,687	9,435	57	74	5,205	3,498	8,834	–	–	243	182	425	1·40	2·05	223·95	129·22	356·62
DAR ES SALAAM	426	486	4,421	1,685	7,018	418	483	4,225	1,871	6,997	6	3	148	70	227	10·04	10·09	191·08	82·43	293·64
TOTALS GENERAL HOSPITALS ...	1,359	1,559	36,698	31,365	90,981	1,323	1,546	54,243	30,183	87,295	23	8	2,049	1,231	3,311	30·67	32·37	2 037·71	926·84	3,027·5 9
II. SPECIAL HOSPITALS																				
CENTRAL REGION																				
Mirembe Mental Hospital Dodoma	3	3	222	82	310	3	1	129	40	173	–	–	43	13	56	2·57	6·27	257·66	112·85	379·35
NORTHERN REGION																				
Tuberculosis Hospital, Kibongoto ...	–	–	475	207	682	–	–	419	177	596	–	–	22	9	31	–	–	228·10	123·50	351·60
Infectious Diseases Hospital, Tanga	–	–	74	– –	74	–	–	50	–	50	–	–	13	–	13	–	–	26·70	–	26·70
DAR ES SALAAM																				
Infectious Diseases Hospital	–	–	487	43	530	–	–	485	34	519	–	–	21	6	27	–	–	99·31	32·90	132·21
Msasani Mental Hospital	–	–	58	9	67	–	–	58	10	68	–	–	3	–	3	–	–	25·21	0·70	25·91
TOTALS SPECIAL HOSPITALS ...	3	3	1,316	341	1,663	3	1	1,141	261	1,406	–	–	102	28	130	2·57	6·27	636·98	269·95	915·77

TABLE V—*(contd.)*

IN-PATIENTS—GOVERNMENT GENERAL AND SPECIAL HOSPITALS AND DISPENSARIES

(Excluding Maternity and Child Health Centres)

Figures refer to the twelve-month period 1st December, 1953—30th November, 1954

	Number admitted during the year (a)					Number discharged during the year					Deaths					Daily average in hospital				
	European		Non-European		Total	European		Non-European		Total	European		Non-European		Total	European		Non-European		Total
	M	F	M	F		M	F	M	F		M	F	M	F		M	F	M	F	
									III.	DISPENSARIES										
CENTRAL REGION																				
Central Province ...	–	–	492	233	725	–	–	472	223	695	–	–	28	14	42	–	–	5·12	2·17	7·29
S. H. Province ...	–	–	1,045	977	2,022	–	–	1,005	938	1,943	–	–	28	26	54	–	–	20·60	19·24	39·84
EASTERN REGION																				
Eastern Province	–	–	972	118	1,090	–	–	976	119	1,095	–	–	5	1	6	–	–	26·59	3·60	30·19
Southern Province	–	–	146	98	244	–	–	141	93	234	–	–	5	1	6	–	–	8·17	5·90	14·07
NORTHERN REGION																				
Northern Province	–	–	177	11	188	–	–	178	6	184	–	–	3	3	6	–	–	10·52	0·82	11·34
Tanga Province ...	–	–	1,721	1,538	3,259	–	–	1,653	1,475	3,128	–	–	70	46	116	–	–	47·68	38·99	86·67
WESTERN REGION																				
Lake Province ...	–	–	603	575	1,178	–	–	573	550	1,123	–	–	26	23	49	–	–	18·36	14·45	32·81
Western Province	–	–	523	290	813	–	–	497	273	770	–	–	27	27	54	–	–	21·38	14·71	36·09
TOTALS DISPENSARIES ...	–	–	5,679	3,840	9,519	–	–	5,495	3,677	9,172	–	–	192	141	333	–	–	158·42	99·88	258·30
TERRITORIAL TOTALS ...	1,362	1,562	63,693	35,546	102,163	1,326	1,547	60,879	34,121	97,873	23	8	2,343	1,400	3,774	33·24	38·64	2,833·11	1,296·67	4,201·66

(a) These are the total numbers of patients admitted to hospital, and do not include patients remaining in hospital on 1st December, 1953.

TABLE VI

Out-Patients—Government General Hospitals and Dispensaries

(Figures refer to the twelve month period 1st December, 1953—30th November, 1954)

Medical Region and Province	Total Attendances						Total	Total New Cases						Total
	Male			Female				Male			Female			
	European	Asian	African	European	Asian	African		European	Asian	African	European	Asian	African	
I. General Hospitals														
Dar es Salaam ...	2,489	10,166	201,640	2,196	795	68,409	285,695	1,832	5,396	66,476	2,212	266	25,951	102,133
Central Region														
Central Province ...	1,352	2,614	124,588	1,213	670	96,271	226,708	735	1,322	48,532	573	487	36,344	87,993
S. Highlands Province	2,029	1,329	106,661	1,904	434	75,644	188,001	1,270	713	60,442	1,186	284	41,848	105,743
Eastern Region														
Eastern Province ...	1,244	1,424	168,447	787	586	74,147	246,635	639	701	50,637	538	316	25,559	78,390
Southern Province ...	1,381	1,121	131,493	1,098	566	62,858	198,517	963	764	52,833	628	351	25,998	81,537
Northern Region														
Northern Province ...	2,404	501	180,460	1,643	270	117,676	302,954	1,455	394	69,386	878	229	45,717	118,059
Tanga Province ...	2,192	1,600	125,742	1,444	414	66,942	198,334	1,161	954	45,978	709	283	24,807	73,892
Western Region														
Lake Province ...	972	1,375	127,891	702	724	99,379	231,043	838	1,207	86,896	618	621	59,228	149,408
Western Province ...	819	1,724	151,633	441	838	109,244	264,699	647	1,483	58,397	394	646	37,806	99,373
Total—General Hospitals ...	14,882	21,854	1,318,555	11,428	5,297	770,570	2,142,586	9,540	12,934	539,577	7,736	3,483	323,258	896,528
II. Dispensaries														
Central Region														
Central Province ...	8	14	33,412	3	27	23,913	57,377	5	6	9,490	2	12	6,749	16,264
S. Highlands Province	20	15	50,200	12	10	42,907	93,164	16	14	27,525	10	11	24,048	51,624
Eastern Region														
Eastern Province ...	129	611	33,440	–	176	17,566	51,922	39	299	16,360	–	79	5,719	22,496
Southern Province ...	–	–	15,564	–	–	9,419	24,983	–	–	4,494	–	–	2,641	7,135
Northern Region														
Northern Province ...	1	3	6,841	–	–	3,619	10,464	1	3	3,554	–	–	2,502	6,060
Tanga Province ...	14	12	53,856	4	17	48,239	102,142	9	9	28,982	4	8	24,238	53,250
Western Region														
Lake Province ...	43	41	67,606	18	9	52,058	119,775	25	28	33,504	10	7	21,008	54,582
Western Province ...	–	1,733	64,459	–	222	57,695	124,109	–	823	31,025	–	193	24,354	56,395
Total—Dispensaries	215	2,429	325,378	37	461	255,416	383,936	95	1,182	154,934	26	310	111,259	267,806
Territorial—Total	15,097	24,283	1,643,933	11,465	5,758	1,025,986	2,726,522	9,635	14,116	694,511	7,762	3,793	434,517	1,164,334

TABLE VII
MATERNITY AND CHILD HEALTH SERVICES
A. Government Services

	Ante-Natal Clinics		Child Health Clinics		Total Confinements Attended	Deliveries without complications	Deliveries with complications	Abortions	Live Births	Still Births	Maternal Deaths	Infants Deaths
	First Attendances	Total Attendances	First Attendances	Total Attendances								
CENTRAL REGION:												
Central Province	942	2,952	120	470	477	425	52	66	452	25	5	7
S. Highlands Province	2,460	10,207	1,449	6,289	782	663	119	102	760	72	15	18
EASTERN REGION:												
Eastern Province	666	2,454		–	569	460	109	60	528	51	10	18
Southern Province	298	1,584	899	5,960	198	172	26	23	189	8	1	4
NORTHERN REGION:												
Northern Province	1,991	4,730	–	–	1,319	1,014	305	120	1,253	91	13	42
Tanga Province	1,762	8,506	981	13,820	1,032	907	125	131	995	45	16	29
WESTERN REGION:												
Lake Province	3,672	10,977	1,594	6,046	1,989	1,793	196	217	1,939	86	27	32
Western Province	2,804	9,980	1,958	9,553	1,962	1,566	396	125	1,917	95	12	35
DAR ES SALAAM	2,597	10,860	1,729	21,097	1,748	1,283	465	22	1,723	69	9	53
Total Government Services ...	17,192	62,250	8,730	63,235	10,076	8,283	1,793	866	9,756	542	108	238
B. MISSION SERVICES												
CENTRAL REGION:												
Central Province	1,902	6,886	700	2,861	2,290	2,140	150	102	2,225	65	3	40
S. Highlands Province	1,449	3,904	1,485	14,343	522	395	127	40	495	27	9	12
EASTERN REGION:												
Eastern Province	241	875	187	444	578	496	82	26	556	22	2	13
Southern Province	2,032	14,279	3,117 (a)	31,123	2,021	1,674	347	96	1,953	94	19	65
NORTHERN REGION:												
Northern Province	(b)	(b)	(b)	(b)	1,027	868	159	84	988	37	7	35
Tanga Province	3,366	27,420	2,142	8,846	1,566	1,260	306	122	1,463	97	15	55
WESTERN REGION:												
Lake Province	6,814	13,792	2,099	7,401	2,508	2,075	433	203	2,342	174	19	83
Western Province	4,317	19,658	5,910	37,177	2,280	1,933	347	125	2,206	95	13	82
Total Mission Services	22,121	86,814	15,640	102,195	12,792	10,841	1,951	798	12,228	611	87	385

(a) Incomplete Recordings.
(b) Not available.

TABLE VII—(*contd.*)

MATERNITY AND CHILD HEALTH SERVICES

	Ante-Natal Clinics		Child Health Clinics		Total Canfinements Attended	Deliveries without complications	Deliveries with complicotions	Abortions	Live Births	Still Births	Maternal deaths	Deaths Infants
	Total Attendances	First Attendances	First Attendances	Total Attendances								
	C. NATIVE AUTHORITY SERVICES											
CENTRAL REGION:												
Central Province	1,938	2,526	–	–	3,118	2,993	125	31	3,049	81	4	40
S. Highlands Province	1,354	3,381	851	2,170	–	–	–	–	–	–	–	–
EASTERN REGION:												
Eastern Province	–	–	–	–	–	–	–	–	–	–	–	–
Southern Province	–	–	–	–	–	–	–	–	–	–	–	–
NORTHERN REGION:												
Northern Province	5,233	8,581	1,522	2,082	1,649	1,606	43	31	1,615	36	–	5
Tanga Province	–	–	–	–	–	–	–	–	–	–	–	–
WESTERN REGION:												
Lake Province	2,039	3,301	1,226	2,238	644	567	77	36	628	20	3	23
Western Province	2,272	6,539	1,657	5,135	825	820	5	13	806	20	1	12
Total Native Authority Services	12,836	24,328	5,256	11,625	6,236	5,986	250	111	6,098	157	8	80
Territorial Totals	52,149	173,392	29,626	177,055	29,104	25,110	3,994	1,775	28,082	1,310	203	703

TABLE VIII

LEPROSY TREATMENT CENTRES GOVERNMENT AND MISSION

	Number of Leprosaria	Leprosy patients admitted during the year	Discharged	Absconded	Births	Deaths from Leprosy	Deaths from other causes	Leprosy Patients Resident 30th November, 1954				Cases on Sulphone Therapy				In-Patient Burnt out Cases		Non-Leprous Persons Reside nt 30th Nov. 1954		
								Men	Women	Children	Total	Men	Women	Children	Total	Without deformity	With deformity	Adults	Children	Total
CENTRAL REGION:																				
Central Province	2	305	15	39	24	9	31	328	270	85	683	365	234	71	670	69	10	13	98	111
Southern Highlands Province ...	1	392	51	115	9	–	13	305	216	93	614	300	213	93	606	–	–	16	10	26
EASTERN REGION:																				
Eastern Province	2	216	89	97	20	1	3	288	105	39	432	257	90	41	388	–	3	–	–	–
Southern Province	4	623	290	179	76	6	29	1,075	823	187	2,085	871	628	175	1,674	30	26	183	287	420
NORTHERN REGION:																				
Northern Province	1	4	7	2	–	2	1	21	3	–	24	21	3	–	24	–	1	–	–	–
Tanga Province	3	58	16	8	1	–	10	162	26	8	196	161	22	8	191	3	12	6	–	6
WESTERN REGION:																				
Lake Province	2	412	64	100	28	11	2	451	296	177	924	451	296	177	924	–	16	86	109	195
Western Province	2	51	29	4	–	1	3	149	64	55	268	147	58	54	259	–	7	–	–	–
DAR SE SALAAM	1	12	19	–	–	1	–	28	13	–	41	25	13	–	38	–	–	–	–	–
Totals	18	2,073	580	544	158	31	92	2,807	1,816	644	5,267	2,598	1,557	619	4,774	102	75	304	454	758

In addition to the resident patients, more than 6,000 persons received regular treatment as out-patients.

TABLE IX

NATIVE AUTHORITY MEDICAL SERVICES

MEDICAL REGION	Number of Dispensaries	STAFF			Beds	NEW CASES DURING 1954			TOTAL ATTENDANCES DURING 1954		
		Medical Assistants	Rural Medical Aids	Tribal Dressers		Male	Female	Total	Male	Female	Total
CENTRAL REGION											
Central Province	49	–	3	47	37	172,899	146,002	318,901	275,636	254,335	529,971
S. Highlands Province ...	60	–	44	21	–	173,661	169,487	343,148	407,858	381,571	789,429
EASTERN REGION											
Eastern Province	85	2	13	99	26	173,198	133,315	306,513	357,246	287,625	644,871
Southern Province	34	–	2	38	18	72,377	50,074	122,451	180,064	129,965	310,029
NORTHERN REGION											
Northern Province	51	2	10	71	30	151,588	113,704	265,292	259,481	199,629	459,110
Tanga Province	42	2	25	24	33	123,387	82,817	206,204	186,437	138,486	324,923
WESTERN REGION											
Lake Province	111	–	69	71	–	369,968	347,346	717,314	865,467	781,836	1,647,303
Western Province	61	–	22	47	36	152,079	136,276	288,355	325,743	292,829	618,572
Totals ...	[illegible]	6	188	418	180	1,389,157	1,179,021	2,568,178	2,857,932	2,466,276	5,324,208

TABLE X
MISSION MEDICAL SERVICES

	Number of Hospitals and Dispensaries	Beds	In-Patients Admissions	Out-Patients	
				Total Attendances	New Cases
		I. General Hospitals with Doctors			
Central Region					
Central Province	4	283	8,770	100,839	35,645
S. Highlands Province	2	117	3,124	61,094	27,438
Eastern Region					
Eastern Province	3	190	4,519	136,016	25,287
Southern Province	6	519	9,254	308,087	38,035
Northern Region					
Northern Province	2	103	3,169	24,167	12,250
Tanga Province	4	385	7,590	85,618	24,820
Western Region					
Lake Province	6	608	7,936	150,306	45,887
Western Province	3	199	2,486	37,893	12,539
Totals. General hospitals with doctors ...	30	2,404	46,848	861,049	211,876
		II. Hospitals Without Doctors			
Central Region					
Central Province	3	104	1,600	28,518	9,263
S. Highlands Province	8	209	6,526	139,091	38,470
Eastern Region					
Eastern Province	2	66	1,108	52,265	8,692
Southern Province	16	800	17,283	441,809	104,200
Northern Region					
Northern Province	2	76	2,743	39,475	18,601
Tanga Province	3	120	2,458	27,737	7,592
Western Region					
Lake Province	5	198	1,787	61,579	29,251
Western Province	6	226	2,863	144,775	43,596
Totals. Hospitals without doctors	45	1,937	36,368	935,249	259,665
		III. Dispensaries			
Central Region					
Central Province	6	82	1,933	47,837	17,459
S. Highlands Province	2	25	225	19,447	10,041
Eastern Region					
Eastern Province	2	22	602	69,233	19,462
Southern Province	5	80	1,085	100,874	12,445
Northern Region					
Northern Province	4	66	2,288	29,421	16,572
Tanga Province	5	70	1,268	37,696	13,698
Western Region					
Lake Province	3	50	210	26,549	13,693
Western Province	3	46	193	32,513	24,700
Totals. Dispensaries	30	441	7,804	363,570	128,070
Territorial Totals ...	105	4,782	91,020	2,159,868	599,611

In addition, 756,895 out-patient attendances are recorded from Mission out-patient dispensaries.

PART IV

Morbidity and Mortality

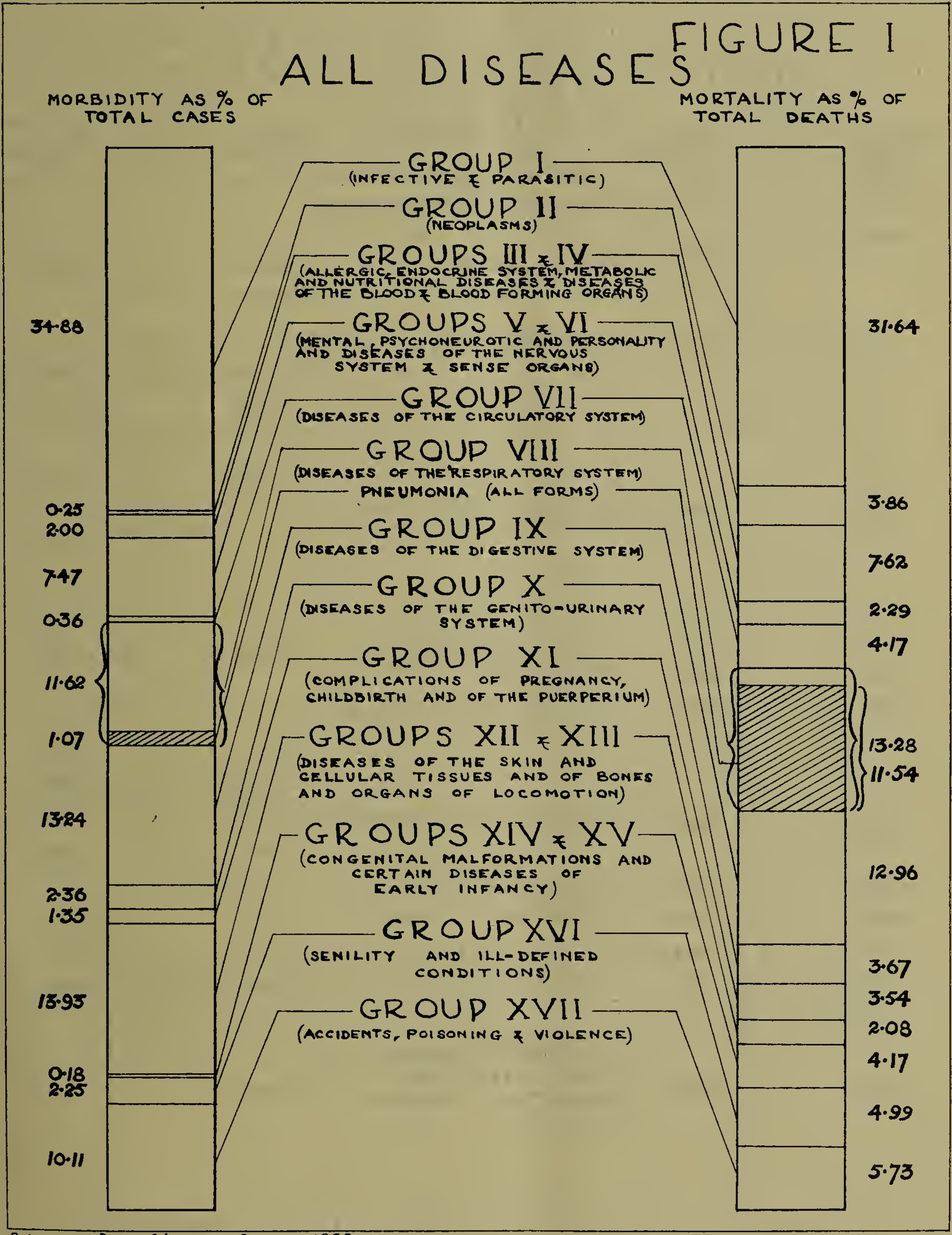


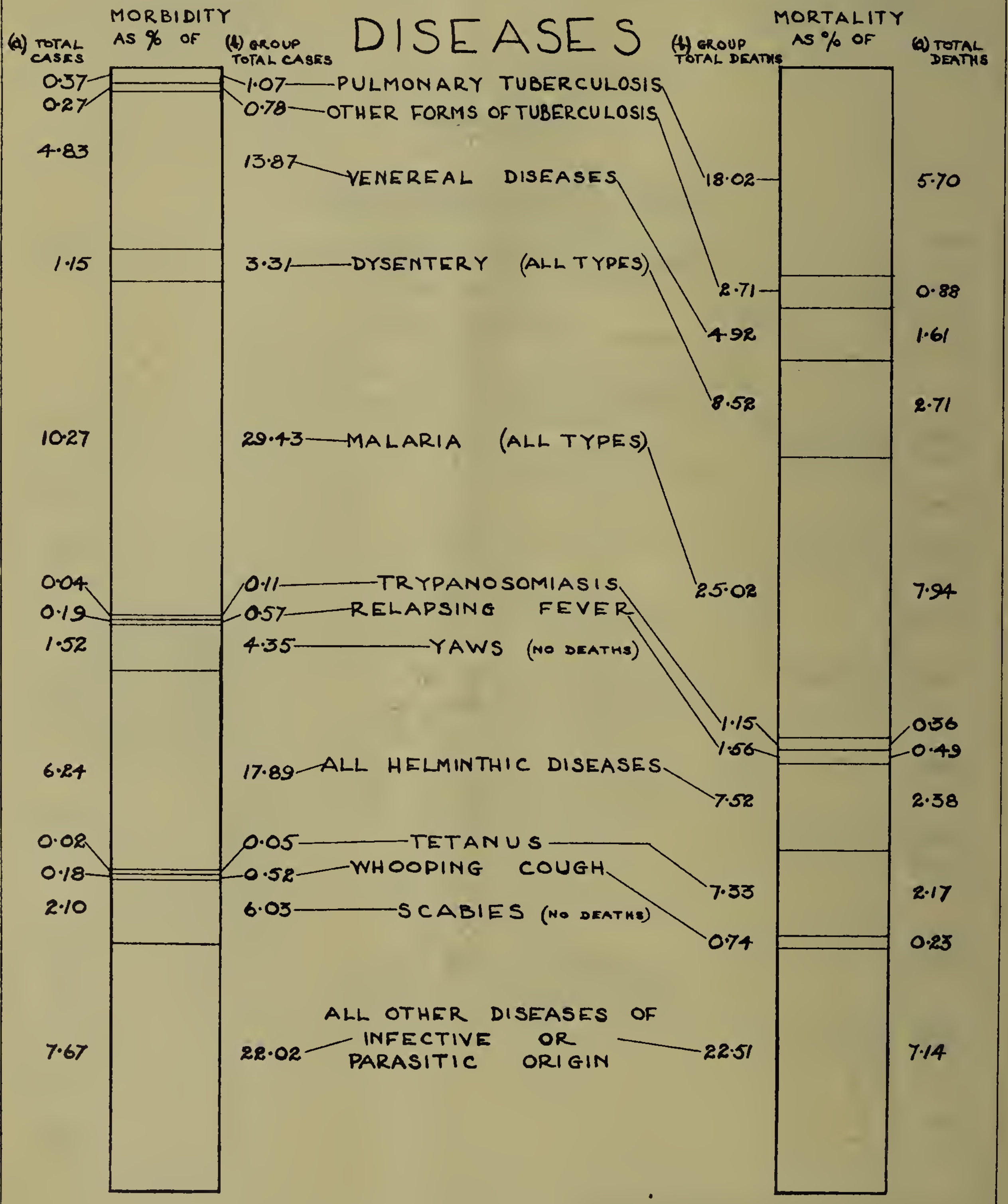
FIGURE I

ALL DISEASES

Printed by Dept. of Lands & Surveys, 1955 (1708)

FIGURE II

INFECTIVE AND PARASITIC DISEASES



MORBIDITY AND MORTALITY EXPERIENCE

The morbidity and mortality of each group of diseases listed in accordance with the International Statistical Classification of Diseases and Causes of Death and expressed as a percentage of the total in-patient and out-patient admissions to Government and Mission Hospitals (Tables XI and XII) are set out diagrammatically in Figure I. Figure II shows the morbidity and mortality of certain diseases in Group I (the Infective and Parasitic Diseases) expressed as a percentage of (a) total diseases treated, and (b) the total diseases within the Group. It comprises most of the diseases which are spread mainly by sanitary defects of the environment, and which are most susceptible to control by measures directed at improving the sanitary environment. Their incidence is therefore an indication of prevailing sanitary standards.

As in previous years, it will be seen that the Group I diseases (Infective and Parasitic) preponderate over all other Group in respect of both morbidity and mortality. They account for a little more than one third of the total number of cases treated and a similar proportion of the total hospital deaths.

Group II (Neoplasms) and Group VII (Diseases of the Heart and Circulatory System), although responsible for a small proportion of the total cases treated, were among the most important of the killing diseases in hospitals.

Turning to Figure II, it will be seen that the highest proportion both of diseases and deaths within Group I are attributable to malaria (all forms). This disease accounted for 29·43 per cent of all cases treated, and nearly 8 per cent of the recorded deaths from all causes.

The diseases causing the greatest number of deaths were pneumonia (all forms) (532), malaria (all forms) (366), gastro-enteritis (children and adults) (280) and pulmonary tuberculosis (263). Of these, pulmonary tuberculosis and pneumonia occupy a place of importance in the mortality tables out of all proportion to the relatively small number of cases treated; tuberculosis accounted for 0·37 per cent of the total treated and 5·7 per cent of the total deaths, while, the pneumonias accounted for 1·07 per cent of cases treated and 11·51 per cent of total deaths.

Diseases of the digestive system accounted for approximately 13 per cent of the cases treated and 13 per cent of the total mortality. By far the highest proportion of deaths within this group (6·1 per cent) were caused by gastro intestinal infections which are spread by defective personal and environmental hygiene.

TABLE XI

DISEASES

In-Patients—Government and Mission Hospitals

(Hospitals with resident doctors only—1st December 1953 to 30th November, 1954)

	GOVERNMENT HOSPITALS						MISSION HOSPITALS						TERRITORIAL					
	Cases			Deaths			Cases			Deaths			Total Cases	Total Deaths	Group Totals		Percentage Moribdity in Group	Percentage Mortality in Group
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total			Cases	Deaths		
GROUP I																		
Infective and Parasitic Diseases																		
Tuberculosis of the respiratory system	1,532	480	2,012	170	45	215	349	201	550	36	12	48	2,562	263			4·67	18·04
Tuberculosis of meninges and central nervous system	13	9	22	7	3	10	2	2	4	1	1	2	26	12			0·05	0·82
Tuberculosis of intestines, Peritonaum and mesenteric glands ...	35	14	49	5	2	7	32	7	39	2	—	2	88	9			0·16	0·62
Tuberculosis of bones and joints ...	164	58	222	5	3	8	29	21	50	—	—	—	272	8			0·50	0·55
Tuberculosis, all other forms ...	155	74	229	6	3	9	39	23	62	1	2	3	291	12			0·53	0·82
Congenital syphilis	76	60	136	20	14	34	53	98	151	4	8	12	287	46			0·53	3·16
Early syphilis (Primary and Secondary)	711	262	973	3	2	5	230	284	514	—	—	—	1,487	5			2·71	0·34
Tabes dorsalis	7	2	9	—	—	—	2	27	29	—	—	—	38	—			0·07	—
General paralysis of insane	12	1	13	3	1	4	1	2	3	—	—	—	16	4			0·03	0·27
All other syphilis	266	98	364	6	2	8	160	223	383	1	—	1	747	9			1·36	0·62
Gonorrhoea, genito-urinary ...	860	345	1,205	4	1	5	1,302	1,286	2,588	2	1	3	3,793	8			6·92	0·55
Gonococcal infection of the eye ...	53	8	61	—	—	—	28	46	74	—	—	—	135	—			0·25	—
Other gonococcal infections... ...	295	71	366	3	—	3	30	6	36	—	2	2	402	5			0·73	0·3[illegible]
Typhoid fever...	299	180	479	42	10	52	80	58	138	8	4	12	617	64			1·13	4·39
Paratyphoid fever and other Salmonella infections	155	17	172	1	—	1	5	1	6	—	—	—	178	1			0·32	0·07
Cholera	—	—	—	—	—	—	—	—	—	—	—	—	—	—			—	—
Brucellosis (undulant fever)... ...	27	11	38	—	—	—	2	4	6	—	—	—	44	—			0·08	—
Bacillary dysentery	415	208	623	33	14	47	96	132	228	6	3	9	851	56			1·55	3·84
Amoebiasis	401	121	522	15	5	20	373	351	724	6	1	7	1,246	27			2·27	1·85
Other unspecified forms of dysentery	406	166	572	24	10	34	139	101	240	6	2	8	812	42			1·48	2·88
Scarlet fever	17	—	17	—	—	—	2	3	5	—	—	—	22	—			0·04	—
Streptococcal sore throat	102	47	149	1	—	1	19	30	49	2	1	3	198	4			0·36	0·27
Erysipelas	13	—	13	—	—	—	11	8	19	—	—	—	32	—			0·06	—
Septicaemia and pyaemia	67	16	83	21	10	31	22	18	40	—	—	—	123	31			0·22	2·13
Diphtheria	9	3	12	15	—	15	4	4	8	1	—	1	20	16			0·04	1·10
Whooping cough	114	109	223	2	6	8	46	66	112	3	—	3	335	11			0·61	0·75
Meningococcal infections	107	70	177	32	30	62	53	62	115	20	23	43	292	105			0·53	7·20
Plague...	—	—	—	—	—	—	—	—	—	—	—	—	—	—			—	—
Leprosy	216	35	251	13	1	14	102	34	136	3	1	4	387	18			0·71	1·23

TABLE XI—(*contd.*)

DISEASES

IN-PATIENTS—GOVERNMENT AND MISSION HOSPITALS

(Hospitals with resident doctors only—1st December, 1953 to 30th November, 1954)

	GOVERNMENT HOSPITALS						MISSION HOSPITALS						TERRITORIAL					
	CASES			DEATHS			CASES			DEATHS			TOTAL Cases	TOTAL Deaths	GROUP TOTALS		Percentage Morbidity in Group	Percentage Mortality in Group
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total			Cases	Deaths		
Tetanus	123	76	199	45	36	81	20	18	38	9	10	19	237	100			0·43	6·85
Anthrax	169	58	227	5	5	10	33	36	69	1	2	3	296	13			0·54	0·89
Acute poliomyelitis	54	69	123	6	5	11	10	3	13	2	—	2	136	13			0·25	0·89
Acute infectious encephalitis ...	6	2	8	2	—	2	1	1	2	—	–	—	10	2			0·02	0·14
Late effects of acute poliomyelitis and acute infectious encephalitis	15	11	26	—	—	—	15	12	27	—	—	—	53	—			0·10	—
Variola major	18	5	23	1	—	1	—	3	3	—	1	1	26	2			0·05	0·14
Variola minor	13	5	18	—	—	—	2	3	5	—	—	—	23	—			0·04	—
Measles	285	249	534	2	—	2	69	100	169	1	2	3	703	5			1·28	0·34
Yellow fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—			—	—
Infectious hepatitis	91	44	135	4	3	7	56	52	108	7	3	10	243	17			0·44	1·16
Rabies	—	—	—	—	—	—	—	—	—	—	—	—	—	—			—	—
Louse-borne epidemic typhus ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—			—	—
Flea-borne endemic typhus ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—			—	—
Tick-borne typhus	15	2	17	1	—	1	—	—	—	—	—	—	17	1			0·03	0·07
Mite-borne typhus	—	—	—	—	—	—	—	—	—	—	—	—	—	—			—	—
Typhus unspecified, and other rickettsial diseases	5	7	12	—	1	1	—	1	1	—	—	—	13	1			0·02	0·07
Vivax malaria (benign tertian) ...	855	396	1,251	27	9	36	740	420	1,160	3	5	8	2,411	44			4·40	3·02
Malariae malaria (quartan) ...	32	10	42	—	8	8	—	8	8	—	1	1	50	9			0·09	0·62
Falciparum malaria (Malignant tertian)	3,191	1,831	5,022	54	42	96	1,374	1,771	3,145	11	29	40	8,167	136			14·90	9·33
Blackwater fever	10	2	12	3	—	3	2	1	3	—	—	—	15	3			0·03	0·20
Other and unspecified forms of malaria	3,054	1,628	4,682	68	32	100	1,698	2,596	4,294	36	41	77	8,976	177			16·37	12·14
Schistosomiasis vesical (S. haematobium)	763	263	1,026	5	—	5	908	563	1,471	5	5	10	2,497	15			4·55	1·03
Schistosomiasis intestinal (S. Mansoni)	183	57	240	2	1	3	24	19	43	1	1	2	283	5			0·52	0·34
Schistosomiasis pulmonary (S. japonicum)	3	1	4	—	—	—	—	—	—	—	—	—	4	—			0·01	—
Other and unspecified schistosomiasis	65	1	66	2	—	2	3	—	3	—	—	—	69	2			0·13	0·14
Hydatid diseases	63	7	70	—	—	—	—	1	1	—	—	—	71	—			0·13	—
Filariasis (bancrofti)	99	18	117	—	—	—	58	13	71	1	—	1	188	1			0·34	0·07
Onchocerciasis	22	3	25	—	1	1	—	1	1	—	—	—	26	1			0·05	~~0·07~~
Other filariasis	135	8	143	2	—	2	22	7	29	1	—	1	172	3			0·31	0·20
Ankylostomiasis	2,243	832	3,075	55	12	67	1,776	1,667	3,443	8	3	11	6,518	78			11·89	5·34
Tapeworm and other cestode infestations	297	99	396	1	—	1	128	138	266	—	—	—	662	1			1·21	0·07
Ascariasis	559	292	851	2	—	2	332	468	800	1	1	2	1,651	4			3·01	0·27
Guinea worm (dracunculosis) ...	2	—	2	—	—	—	—	—	—	—	—	—	2	—			0·00	—
Other diseases due to helminths ...	68	21	89	—	—	—	97	67	164	—	—	—	253	—			0·46	—
Lymphogranuloma venereum ...	49	3	52	—	—	—	16	4	20	1	4	5	72	5			0·13	0·34

TABLE XI—(*contd.*)

DISEASES

IN-PATIENTS—GOVERNMENT AND MISSION HOSPITALS

(Hospitals with resident doctors only—1st December, 1953 to 30th November, 1954)

	GOVERNMENT HOSPITALS						MISSION HOSPITALS						TERRITORIAL					
	CASES			DEATHS			CASES			DEATHS			TOTAL Cases	TOTAL Deaths	GROUP TOTALS		Percentage Morbidity in Group	Percentage Mortality in Group
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total			Cases	Deaths		
Granuloma inguinale, venereal ...	33	2	35	—	—	—	14	3	17	—	—	—	52	—			0·09	—
Chancroid and other unspecified venereal diseases	75	9	84	—	—	—	19	5	24	1	2	3	108	3			0·20	0·20
Food poisoning infection and intoxication	26	13	39	—	2	2	—	8	8	—	—	—	47	2			0·09	0·14
Relapsing fever, louse-borne ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—			—	—
Relapsing fever, tick-borne	620	354	974	5	10	15	139	174	313	3	5	8	1,287	23			2·35	1·57
Leptospirosis icterohaemorrhagica (Weil's disease)	6	12	18	1	—	1	4	1	5	—	—	—	23	1			0·04	0·07
Yaws	411	193	604	—	—	—	402	275	677	—	—	—	1,281	—			2·34	—
Chickenpox	501	116	617	2	—	2	31	10	41	—	—	—	658	2			1·20	0·14
Mumps	66	20	86	—	—	—	11	11	22	—	—	—	108	—			0·20	—
Dengue	4	—	4	—	—	—	2	4	6	—	—	—	10	—			0·02	—
Trachoma	39	13	52	—	—	—	147	122	269	—	—	—	321	—			0·59	—
Sandfly fever	—	—	—	—	—	—	—	2	2	—	—	—	2	—			0·00	—
Leishmaniasis	1	1	2	—	—	—	—	—	—	—	—	—	2	—			0·00	—
Trypanosomiasis gambiensis ...	25	2	27	3	—	3	1	—	1	—	—	—	28	3			0·05	0·20
Trypanosomiasis rhodesiensis ...	304	58	362	7	3	10	63	6	69	2	2	4	431	14			0·79	0·95
Other and unspecified trypanosomiasis	57	21	78	3	3	6	5	—	5	1	1	2	83	8			0·15	0·55
Dermatophytosis	14	8	22	—	—	—	36	14	50	—	—	—	72	—			0·13	—
Scabies	266	113	379	—	—	—	119	117	236	—	—	—	615	—			1·12	—
All other diseases classified as infective and parasitic	277	86	363	1	1	2	110	77	187	5	1	6	550	8	54,823	1,458	1·00	0·55
GROUP II																		
Neoplasms																		
Malignant neoplasm of buccal cavity and pharynx	8	4	12	1	—	1	11	7	18	—	3	3	30	4			1·55	2·25
Malignant neoplasm of oesophagus	14	1	15	1	—	1	6	1	7	—	—	—	22	1			1·13	0·56
Malignant neoplasm of stomach ...	18	5	23	6	1	7	12	9	21	—	4	4	44	11			2·27	6·18
Malignant neoplasm of intestine, except rectum	9	5	14	3	1	4	10	9	19	1	—	1	33	5			1·70	2·81
Malignant neoplasm of rectum ...	2	3	5	1	—	1	11	2	13	—	—	—	18	1			0·98	0·56
Malignant neoplasm of larynx ...	1	1	2	1	—	1	1	—	1	—	—	—	3	1			0·15	0·56
Malignant neoplasm of trachea, and of bronchus and lung not specified as secondary	3	3	6	1	—	1	3	1	4	—	—	—	10	1			0·52	0·56

TABLE XI—(*Contd.*)

DISEASES

IN-PATIENTS—GOVERNMENT AND MISSION HOSPITALS

(Hospitals with resident doctors only—1st December, 1953, to 30th November, 1954)

	GOVERNMENT HOSPITALS						MISSION HOSPITALS						TERRITORIAL					
	CASES			DEATHS			CASES			DEATHS			TOTAL Cases	TOTAL Deaths	GROUP TOTALS		Percentage Morbidity in Group	Percentage Mortality in Group
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total			Cases	Deaths		
Malignant neoplasm of breast ...	2	12	14	—	2	2	1	14	15	—	1	1	29	3			1·50	1·69
Malignant neoplasm of cervix uteri	—	54	54	—	7	7	—	35	35	—	1	1	89	8			4·60	4·49
Malignant neoplasm of other and unspecified parts of uterus	—	77	77	—	8	8	—	34	34	—	4	4	111	12			5·74	6·74
Malignant neoplasm of prostate ...	16	2	18	5	—	5	9	—	9	3	—	3	27	8			1·40	4·49
Malignant neoplasm of skin... ...	25	9	34	3	—	3	3	16	19	—	—	—	53	3			2·74	1·68
Malignant neoplasm of bone and connective tissue	32	9	41	4	—	4	15	5	20	1	3	4	61	8			3·15	4·49
Malignant neoplasm of liver and biliary passages	59	34	93	24	12	36	23	15	38	9	4	13	131	49			6·77	27·54
Malignant neoplasm of all other and unspecified sites ...	67	52	119	16	6	22	38	28	66	3	3	6	185	28			9·55	15·73
Leukaemia and aleukaemia... ...	10	1	11	4	3	7	4	4	8	1	1	2	19	9			0·98	5·06
Lymphosarcoma and other neoplasms of lymphatic and haematopoietic system	20	8	28	2	2	4	8	4	12	2	1	3	40	7			2·07	3·93
Benign neoplasms and neoplasms of unspecified nature	230	410	640	7	7	14	71	318	389	1	4	5	1,029	19	1,934	178	53·20	10·68
GROUPS III AND IV																		
Allergic Endocrine system, Metabolic and Nutritional Diseases and Diseases of the Blood and Blood-Forming Organs																		
Nontoxic goitre	6	6	12	—	1	1	4	27	31	—	—	—	43	1			0·84	0·28
Tyrotoxicosis with or without goitre	4	14	18	—	—	—	—	7	7	—	—	—	25	—			0·49	—
Diabetes mellitus	73	29	102	8	1	9	30	18	48	2	—	2	150	11			2·92	3·14
Beriberi	6	5	11	1	1	2	24	25	49	2	1	3	60	5			1·17	1·42
Pellagra	46	8	54	1	3	4	18	10	28	—	—	—	82	4			1·60	1·14
Scurvy	13	1	14	—	—	—	4	13	17	—	1	1	31	1			0·60	0·28
Kwashiorkor	105	39	144	18	6	24	93	133	226	9	12	21	370	45			7·22	12·82
Other deficiency states	304	255	559	63	39	102	178	139	317	17	13	30	876	132			17·09	37·61
Pernicious and other hyperchromic anaemias	40	41	81	7	5	12	18	6	24	6	1	7	105	19			2·05	5·41
Iron deficiency anaemias (hypochromic)	304	180	484	11	7	18	193	310	503	3	3	6	987	24			19·25	6·84
Other specified and unspecified anaemias	395	210	605	39	14	53	192	377	569	4	3	7	1,1	60			22·90	17·09
Asthma	381	203	584	5	5	10	89	52	141	—	1	1	725	11			14·14	3·14
Other allergic disorders endocrine metabolic and blood diseases ...	211	115	326	18	16	34	83	90	173	4	—	4	499	38	5,127	351	9·73	10·83

TABLE XI—(*contd.*)

DISEASES

IN-PATIENTS—GOVERNMENT AND MISSION HOSPITALS

(Hospitals with resident doctors only—1st December, 1953 to 30th November, 1954)

	GOVERNMENT HOSPITALS						MISSION HOSPITALS						TERRITORIAL					
	CASES			DEATHS			CASES			DEATHS			TOTAL Cases	TOTAL Deaths	GROUP TOTALS		Percentage Morbidity in Group	Percentage Mortality in Group
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total			Cases	Deaths		
GROUP V																		
Mental, Psychoneurotic and Personality Disorders																		
Psychoses	44	14	58	—	1	1	23	38	61	—	—	—	119	1			39·93	33·33
Psychoneuroses and disorders of personality...	28	23	51	1	—	1	23	18	41	—	—	—	92	1			30·87	33·33
Mental deficiency	47	30	77	—	—	—	3	7	10	—	1	1	87	1	298	3	29·20	33·33
GROUP VI																		
Diseases of the Nervous System and Sense Organs																		
Vascular lesions affecting central nervous system	39	16	55	6	6	12	12	18	30	3	3	6	85	18			1·52	17·48
Nonmeningococcal meningitis ...	77	35	112	22	9	31	10	14	24	3	7	10	136	41			2·43	39·81
Multiple sclerosis	—	2	2	—	—	—	1	—	1	—	—	—	3	—			0·05	—
Epilepsy	123	42	165	4	3	7	36	25	61	2	—	2	226	9			4·03	8·74
Inflammatory diseases of eye . .	841	381	1,222	—	—	—	505	538	1,043	—	—	—	2,265	—			40·38	—
Cataract	106	33	139	—	—	—	163	64	227	—	—	—	366	—			6·52	—
Glaucoma	13	6	19	—	—	—	33	18	51	—	—	—	70	—			1·25	—
Otitis externa...	26	25	51	—	—	—	20	25	45	—	—	—	96	—			1·70	—
Otitis media and mastoiditis ...	158	76	234	4	1	5	95	100	195	—	—	—	429	5			7·65	4·85
Other inflammatory diseases of ear...	70	29	99	1	—	1	31	32	63	—	—	—	162	1			2·89	0·97
All other diseases and conditions of eye	553	185	738	2	—	2	183	110	293	—	—	—	1,031	2			18·33	1 94
All other diseases of the nervous system and sense organs	374	166	540	13	8	21	115	85	200	4	2	6	740	27	5,609	103	13·19	26·21
GROUP VII																		
Diseases of the Circulatory System																		
Rheumatic fever	70	43	113	—	2	2	33	17	50	—	—	—	163	2			11·52	1·04
Chronic rheumatic heart disease ...	36	10	46	7	1	8	15	16	31	2	3	5	77	13			5·44	6·77
Arteriosclerotic and degenerative heart disease	29	4	33	8	1	9	53	33	86	6	6	12	119	21			8·41	10·94
Other diseases of the heart... ...	180	80	260	53	20	73	112	111	223	16	10	26	483	99			34·13	51·56
Hypertension with heart disease ...	17	14	31	5	4	9	1	3	4	—	—	—	35	9			2·48	4·69
Hypertension without mention of Heart	27	7	34	2	—	2	23	11	34	—	—	—	68	2			4·81	1·04
Diseases of arteries	11	3	14	2	1	3	6	2	8	1	1	2	22	5			1·55	2·60
Other diseases of circulatory system	251	104	355	22	13	35	47	46	93	5	1	6	448	41	1,415	192	31·66	21·36

TABLE XI—(*contd.*)

DISEASES

IN-PATIENTS—GOVERNMENT AND MISSION HOSPITALS

(Hospitals with resident doctors only—1st December, 1953 to 30th November, 1954)

	GOVERNMENT HOSPITALS						MISSION HOSPITALS						TERRITORIAL					
	CASES			DEATHS			CASES			DEATHS			TOTAL Cases	TOTAL Deaths	GROUP TOTALS		Percentage Morbidity in Group	Percentage Mortality in Group
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total			Cases	Deaths		
GROUP VIII																		
Diseases of the Respiratory System																		
Acute upper respiratory infections ...	355	288	643	1	3	4	180	204	384	3	2	5	1,027	9			6·06	1·47
Influenza	361	45	406	—	—	—	130	233	363	—	2	2	769	2			4·54	0·33
Lobar pneumonia	2,762	1,443	4,205	121	69	190	556	582	1,138	21	15	36	5,343	226			31·52	36·93
Bronchopneumonia	1,138	920	2,058	107	112	219	374	443	817	18	18	36	2,875	255			16·96	41·67
Primary, atypical, other and unspecified pneumonia	589	240	829	13	6	19	198	153	351	14	18	32	1,180	51			6·96	8·33
Acute bronchitis	1,297	653	1,950	7	2	9	343	419	762	3	5	8	2,712	17			16·00	2·78
Bronchitis, chronic and unqualified	729	228	957	11	2	13	219	166	385	1	—	1	1,342	14			7·92	2·29
Hypertrophy of tonsils and adenoids	198	150	348	1	1	2	54	80	134	—	—	—	482	2			2·84	0·33
Empyema and abscess of lung ...	36	13	49	6	5	11	11	4	15	—	1	1	64	12			0·38	1·96
Pleurisy (other than tuberculous) ...	125	42	167	2	1	3	84	58	142	1	—	1	309	4			1·82	0·65
Pneumoconiosis	19	3	22	—	1	1	1	1	2	—	—	—	24	1			0·14	0·16
All other respiratory diseases ...	284	92	376	10	1	11	237	210	447	5	3	8	823	19	16,950	612	4·86	3·10
GROUP IX																		
Diseases of the Digestive System																		
Dental caries	133	78	211	1	1	2	56	55	111	—	—	—	322	2			3·13	0·34
All other diseases of teeth and supporting structures	175	86	261	4	2	6	61	97	158	2	—	2	419	8			4·08	1·34
Ulcer of stomach	38	14	52	3	—	3	20	7	27	2	1	3	79	6			0·77	1·01
Ulcer of duodenum	39	4	43	3	—	3	7	2	9	—	1	1	52	4			0·51	0·67
Gastritis and duodenitis	121	44	165	1	2	3	47	39	86	—	1	1	251	4			2·44	0·67
Appendicitis	166	115	281	12	1	13	21	15	36	—	—	—	317	13			3·08	2·18
Intestinal obstruction and hernia ...	1,688	130	1,818	78	20	98	560	76	636	13	7	20	2,454	118			23·88	19·76
Gastro-enteritis and colitis between 4 weeks and 2 years	414	304	718	23	36	59	175	171	346	8	11	19	1,064	78			10·35	13·06
Gastro-enteritis and colitis ages 2 years and over	1.278	603	1,881	135	58	193	140	165	305	3	6	9	2,186	202			21·26	33·83
Chronic enteritis and ulcerative colitis	35	31	66	—	1	1	15	11	26	—	—	—	92	1			0·89	0·17
Cirrhosis of the liver	217	89	306	60	13	73	44	31	75	9	1	10	381	83			3·71	13·90
Cholelithiasis and cholecystitis ...	34	15	49	2	—	2	3	2	5	—	—	—	54	2			0·52	0·34
Other diseases of digestive system ...	1,247	697	1,944	36	23	59	297	365	662	8	9	17	2,606	76	10,277	597	25·38	12·73

TABLE XI—(*contd.*)

DISEASES

IN-PATIENTS—GOVERNMENT AND MISSION HOSPITALS

(Hospitals with resident doctors only—1st December, 1953 to 30th November, 1954)

	GOVERNMENT HOSPITALS						MISSION HOSPITALS						TERRITORIAL					
	CASES			DEATHS			CASES			DEATHS			TOTAL Cases	TOTAL Deaths	GROUP TOTALS		Percentage Morbidity in Group	Percentage Mortality in Group
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total			Cases	Deaths		
GROUP X																		
Diseases of the Genito-Urinary System																		
Acute nephritis	34	26	60	8	10	18	29	46	75	3	1	4	135	22			1·65	13·02
Chronic, other and unspecified nephritis	84	45	129	13	7	20	65	44	109	7	2	9	238	29			2·91	17·16
Infections of kidney (other than tuberculous)	37	24	61	3	—	3	27	23	50	2	—	2	111	5			1·36	2·96
Calculi of urinary system	38	8	46	2	1	3	14	1	15	2	—	2	61	5			0·74	2.96
Hyperplasia of prostate	104	—	104	10	—	10	17	—	17	2	—	2	121	12			1·48	7·10
Diseases of breast	—	174	174	—	—	—	—	111	111	—	—	—	285	—			3·49	—
Hydrocele	889	13	902	3	—	3	424	9	433	3	—	3	1,335	6			16·33	3·55
Disorders of menstruation	—	380	380	—	6	6	—	334	334	—	—	—	714	6			8·73	3·55
All other diseases of the genito-urinary system	1,751	1,608	3,359	33	25	58	832	986	1,818	16	10	26	5,177	84	8,177	169	63·31	49·70
GROUP XI																		
Deliveries and Complications of Pregnancy, Childbirth and the Puerperium																		
Sepsis of pregnancy, childbirth and the puerperium	—	76	76	—	9	9	—	97	97	—	—	—	173	9			1·24	5·52
Toxaemias of pregnancy and the puerperium	—	176	176	—	4	4	—	45	45	—	2	2	221	6			1·58	3·68
Haemorrhage of pregnancy and childbirth	—	118	118	—	12	12	—	127	127	—	2	2	245	14			1·75	8·59
Abortion without mention of sepsis or toxaemia	—	765	765	—	1	1	—	372	372	—	1	1	1,137	2			8·13	1·23
Abortion with sepsis	—	87	87	—	7	7	—	57	57	—	—	—	144	7			1·03	4·29
Other complications of pregnancy, childbirth and the puerperium ...	—	1,229	1,229	—	85	85	—	967	967	—	23	23	2,196	108			15·69	66·26
Delivery without complications ...	—	6,208	6,208	—	10	10	—	3,665	3,665	—	7	7	9,873	17	13,989	163	70·58	10·43
GROUPS XII AND XIII																		
Diseases of the Skin and Cellular Tissues and Diseases of the Bones and Organs of Movement																		
Infections of skin and subcutaneous tissue	3,069	722	3,791	19	8	27	485	341	826	2	1	3	4,617	30			31·52	31·25
Arthritis and spondylitis	572	116	688	3	1	4	115	67	182	—	—	—	870	4			5·94	4·17
Muscular rheumatism and rheumatism unspecified	521	213	734	1	—	1	138	150	288	—	—	—	1,022	1			6·98	1·04

TABLE XI—(*contd.*)

DISEASES

IN-PATIENTS—GOVERNMENT AND MISSION HOSPITALS

(Hospitals with resident doctors only—1st December, 1953 to 30th November, 1954)

	GOVERNMENT HOPITALS						MISSION HOSPITALS						TERRITORIAL					
	CASES			DEATHS			CASES			DEATHS			TOTAL Cases	TOTAL Deaths	GROUP TOTAL		Percentage Morbidity in Group	Percentage Mortality in Group
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total			Cases	Deaths		
Osteomyelitis and perostitis ...	376	90	466	8	3	11	86	47	133	—	1	1	599	12			4·09	12·50
Ankylosis and acquired musculo-skeletal deformities	39	12	51	—	—	—	17	10	27	—	—	—	78	—			0·53	—
Chronic ulcer of skin (including tropical ulcer)	3,032	904	3,936	23	15	38	762	641	1,403	2	4	6	5,339	44			36·46	45·83
All other diseases of skin	775	264	1,039	2	—	2	99	94	193	—	—	—	1,232	2			8·41	2·08
All other diseases of musculo-skeletal system	488	204	692	1	1	2	133	64	197	—	1	1	889	3	14,646	96	6·07	3·13
GROUP XIV																		
Congenital Malformations																		
Spina bifida and meningocele ...	1	8	9	—	—	—	5	3	8	1	1	2	17	2			13·28	12·50
Congenital malformations of circulatory system	2	1	3	1	1	2	1	1	2	1	—	1	5	3			3·91	18·75
All other congenital malformations	29	28	57	4	2	6	22	27	49	2	3	5	106	11	128	16	82·81	68·75
GROUP XV																		
Certain Diseases of Early Infancy																		
Birth injuries	1	11	12	—	1	1	8	28	36	5	14	19	48	20			7·62	11·36
Postnatal asphyxia and atelectasis	—	30	30	—	2	2	23	63	86	6	26	32	116	34			18·41	19·32
Diarrhoea of newborn (under 4 weeks)	32	3	35	1	—	1	28	25	53	6	2	8	88	9			13·97	5·11
Ophthalmia neonatorum	2	4	6	—	—	—	2	15	17	—	1	1	23	1			3·65	0·57
Other infections of newborn ...	1	6	7	—	2	2	5	25	30	1	4	5	37	7			5·87	3·98
Haemolytic disease of newborn ...	1	2	3	—	—	—	1	1	2	1	2	3	5	3			0·79	1·70
All other defined diseases of early infancy	5	14	19	1	1	2	8	27	35	—	5	5	54	7			8·57	3·98
Ill-defined diseases peculiar to early nfancy, and immaturity (all types)	26	57	83	3	10	13	28	148	176	13	69	82	259	95	630	176	41·12	53·98
GROUP XVI																		
Symptoms, Senility, and Ill-Defined Conditions																		
Senility without mention of psychosis	84	34	118	28	7	35	12	22	34	16	4	20	152	55			1·66	23·91
Pyrexia of unknown origin	4,360	1,301	5,661	54	25	79	497	448	945	9	22	31	6,606	110			72·31	47·83
Observation without need for further medical care	287	264	551	—	1	1	96	70	166	—	—	—	717	1			7·85	0·43
All other ill-defined causes of morbidity	813	546	1,359	27	14	41	143	159	302	14	9	23	1,661	64	9,136	230	18·18	27·83

TABLE XI—(*contd.*)

DISEASES

IN-PATIENTS—GOVERNMENT AND MISSION HOSPITALS

(Hospitals with resident doctors only—1st December, 1953 to 30th November, 1954)

	GOVERNMENT HOSPITALS						MISSION HOSPITALS						TERRITORIAL					
	CASES			DEATHS			CASES			DEATHS			TOTAL Cases	TOTAL Deaths	GROUP TOTALS		Percentage Morbidity in Group	Percentage Mortality in Group
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total			Cases	Deaths		
GROUP XVII																		
Accidents, Poisoning and Violence																		
Fracture of skull	131	30	161	34	5	39	7	1	8	1	1	2	169	41			1·29	15·53
Fracture of spine and trunk ...	206	47	253	20	2	22	24	7	31	—	—	—	284	22			2 17	8 33
Fracture of limbs	2,318	541	2,859	26	8	34	173	82	255	3	1	4	3,114	38			23·82	14·39
Dislocation without fracture ...	310	57	367	—	—	—	41	14	55	—	—	—	422	—			3·23	—
Sprains and strains of joints and adjacent muscles	426	48	474	—	—	—	24	19	43	—	—	—	517	—			3·95	—
Head injury (excluding fracture) ...	365	45	410	19	—	19	46	15	61	—	1	1	471	20			3·60	7·57
Internal injury of chest, abdomen and pelvis	148	20	168	17	8	25	17	9	26	1	—	1	194	26			1·48	9·85
Laceration and open wounds ...	2,798	464	3,262	17	2	19	316	142	458	2	3	5	3,720	24			28·46	9·09
Superficial injury, contusion and crushing with intact skin surface ...	1,555	337	1,892	1	2	3	48	51	99	—	—	—	1,991	3			15·23	1·14
Effects of foreign body entering through orifice	89	31	120	2	—	2	7	17	24	—	1	1	144	3			1·10	1·14
Burns	516	280	796	26	24	50	87	76	163	3	5	8	959	58			7·33	21·97
Effects of poisons	168	82	250	9	—	9	43	40	83	5	5	10	333	19			2·55	7·20
All other and unspecified effects of external causes	515	123	638	7	2	9	66	52	118	1	—	1	756	10	13,074	264	5·79	3·79
Totals ...	67,739	36,813	104,552	2,205	1,237	3 442	23,247	28,415	51,662	553	613	1,166	156,214	4,608	156,214	4 608		

TABLE XII

DISEASES

OUT-PATIENTS—GOVERNMENT AND MISSION HOSPITALS

(Hospitals with resident doctors only—1st December, 1953 to 30th November, 1954)

	Government Hospitals			Mission Hospitals			Territorial Total	Group Total	Percentage Morbidity in Group
	Male	Female	Total	Male	Female	Total			
GROUP I									
Infective and Parasitic Diseases (and influenza, meningitis and eye diseases)									
Tuberculosis of the respiratory system	1,487	627	2,114	172	142	314	2,428		0·59
Other Tuberculous diseases	2,421	394	2,815	63	61	124	2,939		0·72
Syphilis	13,897	13,301	27,198	1,438	1,914	3,352	30,550		7·44
Gonorrhoea	12,499	5,056	17,555	2,940	2,227	5,167	22,722		5·53
Other venereal diseases	2,735	1,098	3,833	479	348	827	4,660		1·14
Fevers of uncertain origin	41,816	27,491	69,307	4,476	4,924	9,400	78,707		19·17
Bacillary dysentery	1,238	471	1,709	197	388	585	2,294		0·56
Amoebiasis	242	156	398	684	527	1,211	1,609		0·39
Other dysenteries	4,345	3,108	7,453	536	575	1,111	8,564		2·09
Diphtheria	9	–	9	2	4	6	15		0·00
Whooping cough	717	702	1,419	345	354	699	2,118		0·52
Meningitis	8	2	10	10	16	26	36		0·01
Plague	–	–	–	–	–	–	–		–
Leprosy	397	206	603	951	570	1,521	2,124		0·52
Tetanus	12	4	16	9	6	15	31		0·01
Anthrax	75	54	129	27	37	64	193		0·05
Relapsing fever	436	400	836	223	291	514	1,350		0·33
Yaws	9,425	6,226	15,651	862	1,474	3,336	18,987		4·62
Acute poliomyelitis	34	24	58	12	7	19	77		0·02
Smallpox:—									
(a) Variola major	4	2	6	10	7	17	23		0·01
(b) Variola minor	–	2	2	5	5	10	12		0·00
Measles	1,330	1,046	2,376	127	183	310	2,686		0·65
Chickenpox	1,105	469	1,574	80	81	161	1,735		0·42
Mumps	375	221	596	42	42	84	680		0·17
Yellow Fever	–	–	–	–	–	–	–		–

TABLE XII—(*contd.*)

DISEASES

OUT-PATIENTS—GOVERNMENT AND MISSION HOSPITALS

(Hospitals with resident doctors only—1st December, 1953 to 30th November, 1954)

	Government Hospitals			Mission Hospitals			Territorial Total	Group Total	Percentage Morbidity in Group
	Male	Female	Total	Male	Female	Total			
Rabies	–	–	–	–	–	–	–		–
Trachoma	893	506	1,399	404	435	839	2,238		0·55
Typhus and other rickettsial diseases	14	4	18	–	1	1	19		0·00
Malaria:—									
(a) Benign Tertian	1,502	939	2,441	2,116	1,774	3,890	6,331		1·54
(b) Quartan	165	167	332	273	283	556	888		0·22
(c) Subtertian	17,585	13,134	30,719	3,916	3,725	7,641	38,360		9·34
(d) Unclassified	29,694	18,720	48,414	10,087	13,222	23,309	71,723		17·47
Blackwater fever	2	1	3	3	1	4	7		0·00
Trypanosomiasis	10	6	16	47	13	60	76		0·02
Schistosomiasis:—									
(a) Vesical (haematobium)	8,385	3,194	11,579	2,209	1,763	3,972	15,551		3·79
(b) Intestinal (mansoni)	1,148	546	1,694	130	105	235	1,929		0·47
Tapeworm	4,207	2,888	7,095	824	871	1,695	8,790		2·14
Filariasis (bancrofti)...	81	38	119	67	17	84	203		0·05
Onchocerciasis	1	–	1	7	3	10	11		0·00
Ankylostomiasis	9,000	6,962	15,962	3,960	5,280	9,240	25,202		6·14
Ascariasis	8,081	5,942	14,023	1,744	2,396	4,140	18,163		4·42
Guinea worm (dracunculosis)	–	–	–	–	–	–	–		–
Tinea	478	347	825	104	75	179	1,004		0·24
Scabies	14,273	9,119	23,392	1,810	2,316	4,126	27,518		6·70
All other infective and parasitic diseases	4,013	2,834	6,847	634	536	1,170	8,017	410,570	1·95
GROUP II									
Neoplasms									
Malignant neoplasms	27	28	55	31	46	77	132		9·42
Non-malignant	179	189	368	59	287	346	714		50·96
Unspecified	243	184	427	38	90	128	555	1,401	39·62

TABLE XII—(*contd.*)

DISEASES

OUT-PATIENTS—GOVERNMENT AND MISSION HOSPITALS

(Hospitals with resident doctors only—1st December, 1953 to 30th November, 1954)

	GOVERNMENT HOSPITALS			MISSION HOSPITALS			Territorial Total	Group Total	Percentge Morbidity in Group
	Male	Female	Total	Male	Female	Total			
GROUP III									
Allergic, Endocrine system, Matabolic and Nutritional Diseases									
Asthma	1,560	674	2,234	307	228	535	2,769		19·63
Diabetes	63	51	114	21	32	53	167		1·18
Vitamin deficiency states	1,688	806	2,494	809	1,432	2,241	4,735		33·57
Kwashiorkor	509	81	590	144	165	309	899		6·37
Other allergic, endocrine system, metabolic and nutritional diseases	2,591	2,028	4,619	370	548	918	5,537	14,107	39·25
GROUP IV									
Diseases of the Blood and Blood-Forming Organs									
All diseases of the blood and blood-forming organs	1,952	1,644	3,596	1,204	2,686	3,890	7,486	7,486	100·00
GROUPS V AND VI									
Mental, Psychoneurotic and Personality Diseases, and Diseases of the Nervous System and Sense Organs									
Mental disorders	81	65	146	30	23	53	199		0·21
Cerebral haemorrhage	8	2	10	2	3	5	15		0·02
Epilepsy	88	23	111	70	28	98	209		0·22
Other diseases of nervous system	5,153	2,937	8,090	412	371	783	8,873		9·46
Inflammatory and other diseases of the eye and annexa except trachoma	28,341	20,771	49,112	6,038	7,264	13,302	62,414		66·56
Diseases of ear and mastoid	11,762	7,156	18,918	1,581	1,568	3,149	22,067	93,777	23·53

TABLE XII—(*contd.*)

DISEASES

OUT-PATIENTS—GOVERNMENT AND MISSION HOSPITALS

(Hospitals with resident doctors only—1st December, 1953 to 30th November, 1954)

	GOVERNMENT HOSPITALS			MISSION HOSPITALS			Territorial Total	Group Total	Percentage Morbidity in Group
	Male	Female	Total	Male	Female	Total			
GROUP VII									
Diseases of the Circulatory System									
Diseases of the circulatory system:—									
(a) Heart disease	95	144	239	729	590	1,319	1,558		48·58
(b) Other circulatory disease	872	382	1,254	230	165	395	1,649	3,207	51·42
GROUP VIII									
Diseases of the Respiratory System									
Pneumonia	2,223	1,369	3,592	616	665	1,281	4,873		3·53
Other diseases of respiratory system	69,489	44,683	114,172	9,067	9,939	19,006	133,178	138,051	96·47
GROUP IX									
Diseases of the Digestive System									
Diseases of Teeth and supporting structures:—									
(a) Caries	11,652	7,188	18,840	1,574	1,395	2,969	21,809		13·11
(b) Other conditions	6,250	3,657	9,907	511	631	1,142	11,049		6·64
Appendicitis	124	18	142	14	14	28	170		0·10
Intestinal obstruction and hernia	563	48	611	317	35	352	963		0·58
Gastro-enteritis:—									
(a) Between 4 weeks and 2 years	5,805	4,661	10,466	1,312	1,508	2,820	13,286		7·99
(b) 2 years and over	12,125	6,710	18,835	1,258	2,034	3,292	22,127		13·30
Cirrhosis of the liver	55	41	96	16	17	33	129		0·08
Other diseases of liver and bile passages	305	199	504	156	167	323	827		0·50
Other diseases of digestive system	47,424	37,985	85,409	3,929	6,643	10,572	95,981	166,341	57·70

TABLE XII—(*contd.*)

DISEASES

OUT-PATIENTS—GOVERNMENT AND MISSION HOSPITALS

(Hospitals with resident doctors only—1st December, 1953 to 30th November, 1954)

	GOVERNMENT HOSPITALS			MISSION HOSPITALS			Territorial Total	Group Total	Percentage Morbidity in Group
	Male	Female	Total	Male	Female	Total			
GROUP X									
Diseases of the Genito-Urinary System									
Nephritis	60	39	99	161	173	334	433		1·85
Other diseases of genito-urinary system	9,753	6,529	16,282	1,836	4,816	6,652	22,934	23,367	98·15
GROUP XI									
Complications of Pregnancy, Childbirth and the Puerperium									
Diseases of pregnancy, childbirth and the puerperal state		92	92		1,139	1,139	1,231		30·63
(a) Toxaemias of pregnancy		447	447		24	24	471		11·72
(b) Abortion		300	300		212	212	512		12·74
(c) Other conditions of the puerperal state ...		663	663		521	521	1,184		29·46
Normal deliveries		243	243		378	378	621	4,019	15·45
GROUPS XII AND XIII									
Diseases of the Skin and Cellular Tissue, and Diseases of Bones and Organs of Locomotion									
Ulcers	54,355	19,329	73,684	5,169	4,451	9,620	83,304		48·67
Rheumatic conditions	17,000	9,964	26,964	1,454	1,655	3,109	30,073		17·57
Other diseases of bones, skin and musculo-skeletal system	34,674	15,745	50,419	3,880	3,471	7,351	57,770	171,147	33·76

TABLE XII—(*contd.*)

DISEASES

OUT-PATIENTS—GOVERNMENT AND MISSION HOSPITALS

(Hospitals with resident doctors only—1st December, 1953 to 30th November, 1954)

	GOVERNMENT HOSPITALS			MISSION HOSPITALS			Territorial Total	Group Total	Percentage Morbidity in Group
	Male	Famale	Total	Male	Famale	Total			
GROUPS XIV AND XV									
Congenital Malformations and Certain Diseases of Early Infancy									
(a) Diarrhoea of the new-born	151	72	223	53	54	107	330		19·45
(b) Ophthalmia neonatorum	77	35	112	2	2	4	116		6·84
(c) Immaturity	4	2	6	9	17	26	32		1·88
(d) All other malformation and diseases of early infancy	95	53	148	405	666	1,071	1,219	1,697	71·83
GROUP XVI									
Senility and Ill-Defined Conditions									
Senility	321	313	634	24	29	53	687		3·30
All other ill-defined causes of morbidity	9,344	7,905	17,249	1,208	1,689	2,897	20,146	20,833	96·70
GROUP XVII									
Accidents, Poisoning and Violence									
Fractures and dislocations	1,226	452	1,678	177	69	246	1,924		1·58
Injuries by animals and insects	1,398	718	2,116	135	101	236	2,352		1·93
Other wounds and superficial injuries (excluding burns)	31,767	6,630	38,397	4,085	2,161	6,246	44,643		36·65
Burns and scalds	3,139	2,136	5,275	386	346	732	6,007		4·93
Poisons	56	146	202	17	14	31	233		0·19
All other injuries from external causes	15,900	4,187	20,087	1,379	774	2,153	22,240		18·26
Examinations	21,056	15,219	36,275	2,607	5,538	8,145	44,420	121,819	36·46
TOTALS ...	605,742	361,350	967,092	96,857	113,873	210,730	1,177,822	1,177,822	

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